

Presidential Documents

Title 3—THE PRESIDENT

Executive Order 11036

ADMINISTRATION OF THE AGRICULTURAL TRADE DEVELOPMENT AND ASSISTANCE ACT OF 1954, AS AMENDED

By virtue of the authority vested in me by Section 301 of Title 3 of the United States Code, and as President of the United States, it is ordered that Executive Order No. 10900 of January 5, 1961, as amended, be, and it is hereby, further amended as follows:

(I) By substituting for Section 4(a) the following:

"SEC. 4. *Foreign currencies.* (a) (1) Foreign currencies which accrue under Title I of the Act may be used for the purposes set forth in Section 104 of the Act in amounts consonant with applicable provisions of law and of sales agreements and loan agreements. Except as may be inconsistent with such law or agreements, priority shall be accorded to the sale of such currencies to appropriations or to their sale otherwise for dollars. To such extent as he may deem necessary, the Director of the Bureau of the Budget shall fix the amounts of such currencies to be used for the purposes set forth in Section 104. The Director shall notify the Secretary of the Treasury with respect to any amounts so fixed.

"(2) The function conferred upon the President by the penultimate proviso of Section 104 of the Act of waiving the applicability of Section 1415 of the Supplemental Appropriation Act, 1953 (31 U.S.C. 724), is hereby delegated to the Secretary of State in respect of Section 104(e) of the Act and to the Director of the Bureau of the Budget in all other respects."

(II) By inserting the following new paragraph after Section 4(d) (4):

"(5) Those under Section 104(s) of the Act by the Department of the Treasury in consultation with the Department of State. The function conferred upon the President by Section 104(s) of the Act of prescribing terms and conditions is hereby delegated to the Secretary of the Treasury and shall be performed by him in consultation with the Secretary of State."

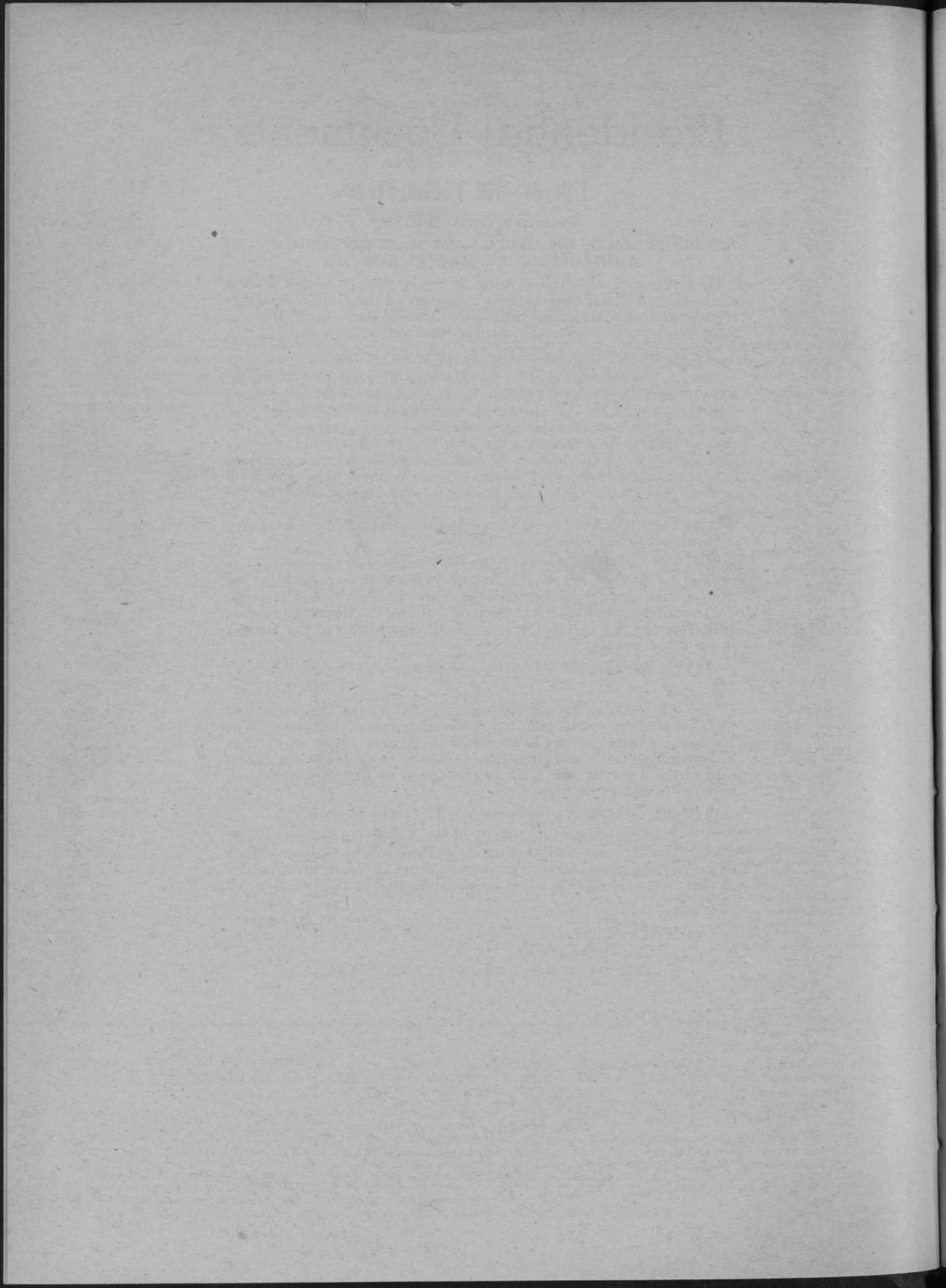
(III) By substituting for Section 4(d) (7) the following:

"(7) Those under Section 104(g) of the Act by the Department of State. The function conferred upon the President by Section 104(g) of the Act of determining the manner in which the loans provided for in that section shall be made is hereby delegated to the Secretary of State."

JOHN F. KENNEDY

THE WHITE HOUSE,
July 11, 1962.

[F.R. Doc. 62-6941; Filed, July 12, 1962; 8:50 a.m.]



Rules and Regulations

Title 5—ADMINISTRATIVE PERSONNEL

Chapter I—Civil Service Commission

PART 37—GROUP LIFE INSURANCE

Cessation and Conversion of Insurance Coverage

Paragraph (g) of § 37.5 is amended as set out below.

§ 37.5 Cessation and conversion of insurance coverage.

(g) During the 31-day extension of life insurance coverage under paragraphs (b), (c), (e), and (f) of this section, an individual may, upon application and without medical examination, convert all or any part of his group life insurance to an individual policy of life insurance at rates applicable to his attained age and class of risk unless, within 3 calendar days after the date his insurance ceased, he returns to a position wherein he is not excluded from coverage.

(Sec. 11, 68 Stat. 742; 5 U.S.C. 2100)

UNITED STATES CIVIL SERVICE COMMISSION,

[SEAL] MARY V. WENZEL,
Executive Assistant to
the Commissioners.

[F.R. Doc. 62-6824; Filed, July 12, 1962;
8:45 a.m.]

Title 13—BUSINESS CREDIT AND ASSISTANCE

Chapter I—Small Business Administration

[Rev. 2]

PART 121—SMALL BUSINESS SIZE STANDARDS

Notice Relating to the Definition of Small Business Government Sub- contractors

(a) Any concern, in connection with subcontracts of \$2,500 or less which relate to Government procurements, will be considered a small business concern if, including its affiliates, its number of employees does not exceed 500 persons.

(b) Any concern, in connection with subcontracts exceeding \$2,500 which relate to Government procurements, will be considered a small business concern if it qualifies as such under § 121.3-8 of this part: *Provided, however, That:*

1. The additional number of employees allowable to firms located in Areas of Substantial Unemployment, as set forth in § 121.3-7 of this part, shall not be applicable to subcontractors.

2. The definition of small business nonmanufacturers, as contained in § 121.3-8(b) of this part, shall not become effective until January 2, 1963.

3. The definition of small businesses in the aircraft equipment industry, as set forth in § 121.3-8(a)(5) of this part, shall not become effective until January 2, 1963.

4. Until January 2, 1963, any concern included in paragraphs 2 and 3 above will be considered a small business concern if, including its affiliates, its number of employees does not exceed 500 persons.

The Small Business Size Standards Regulation (13 CFR Part 121) will be amended to incorporate the foregoing.

Dated: July 3, 1962.

Effective date: The provisions of this notice shall become effective July 15, 1962.

JOHN E. HORNE,
Administrator.

[F.R. Doc. 62-6850; Filed, July 12, 1962;
8:47 a.m.]

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Agency

[Reg. Docket No. 1157]

PART 50—AIRMAN AGENCY CERTIFICATES

PART 51—GROUND INSTRUCTOR RATING

PART 52—REPAIR STATION CERTIFICATES

PART 53—MECHANIC SCHOOL CERTIFICATES

PART 54—PARACHUTE LOFT CER- TIFICATES AND RATINGS

PART 141—PILOT SCHOOLS [NEW]

PART 143—GROUND INSTRUCTORS [NEW]

PART 145—REPAIR STATIONS [NEW]

PART 147—MECHANIC SCHOOLS [NEW]

PART 149—PARACHUTE LOFTS [NEW]

Schools and Other Certificated Agencies

This amendment adds Subchapter H "Schools and Other Certificated Agencies" to Chapter I of Title 14 of the Code of Federal Regulations. The amendment is a part of the program of the Federal Aviation Agency to recodify its regulatory material into a new series of regulations called the "Federal Aviation Regulations" to replace the present

"Civil Air Regulations" and "Regulations of the Administrator".

During the life of the recodification project, Chapter I of Title 14 may contain more than one part bearing the same number. To differentiate between the two, the recodified parts, such as the ones in this subchapter, will be labeled "[New]". The label will of course be dropped at the completion of the project as all of the regulations will be new.

Subchapter H [New] was published as a notice of proposed rule making in the FEDERAL REGISTER on April 19, 1962 (27 F.R. 3756), and circulated as Draft Release 62-16.

Some of the comments received recommend specific substantive changes to the regulations. Although some of the recommendations might, upon further study, appear to be meritorious, they cannot be adopted as a part of the recodification program. The purpose of the program is simply to streamline and clarify present regulatory language and to delete obsolete or redundant provisions. To attempt substantive change (other than minor, relaxatory ones that are completely noncontroversial) would delay the project and would be contrary to the ground rules specified for it in the FEDERAL REGISTER on November 15, 1961 (26 F.R. 10698) and Draft Release 61-25. However, all comments of this nature will be preserved and considered in any later substantive revision of the affected parts. As a result, with one exception, no change has been made in the substance of the rules contained in the notice of proposed rule making. The exception is a clarification and relaxation of the rule relating to work performed off station by repair stations. A new subparagraph (d) has been added to § 145.51 to make it clear that a certificated repair station may under quality controlled circumstances perform maintenance or alteration at a place other than the repair station. One other major change, although not substantive, is the deletion of policy material formerly contained in CAM §§ 53.40-1 and 53.41-1 relating to the details of mechanic school curricula, and their replacement by language based on CAR §§ 53.40 and 53.41. The deleted material was not mandatory and will be considered for inclusion in the Agency Advisory Circular System.

Other comments received suggested changes in style or format or in technical wording. These comments were carefully considered and, where consistent with the style, format, and terminology of the recodification project, were adopted.

The definitions, abbreviations, and rules of construction contained in Part 1 [New] published in the FEDERAL REGISTER on May 15, 1962 (27 F.R. 4587) apply to the new Subchapter H.

Interested persons have been afforded an opportunity to participate in the making of this regulation, and due con-

sideration has been given to all relevant matter presented. The Agency appreciates the cooperative spirit in which the public's comments were submitted.

In consideration of the foregoing, Chapter I of Title 14 is amended by deleting Parts 50, 51, 52, 53, and 54 and by adding Subchapter H [New] reading as hereinafter set forth, effective August 13, 1962.

This amendment is made under the authority of sections 313(a), 314, 601, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421, and 1427).

Issued in Washington, D.C., on July 6, 1962.

N. E. HALABY,
Administrator.

SUBCHAPTER H—SCHOOLS AND OTHER CERTIFICATED AGENCIES [NEW]

Part

- 141 Pilot Schools [New].
- 143 Ground Instructors [New].
- 145 Repair Stations [New].
- 147 Mechanic Schools [New].
- 149 Parachute Lofts [New].

PART 141—PILOT SCHOOLS [NEW]

Subpart A—General

Sec.

- 141.1 Applicability.
- 141.3 Application; issue; and renewal.
- 141.5 Duration of certificates.
- 141.7 Display of certificates.
- 141.9 School ratings.
- 141.11 Quality of instruction.
- 141.13 Student tests.
- 141.15 Curriculum changes.
- 141.17 Graduation certificates.
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- 141.25 Inspections.
- 141.27 Maintenance of personnel, facilities, and equipment.
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Subpart B—Ground Schools

- 141.41 Classroom requirements.
- 141.43 Equipment requirements.
- 141.45 Instructor requirements.
- 141.47 Curriculum requirements: Basic ground school.
- 141.49 Curriculum requirements: Advanced ground school.

Subpart C—Flying Schools

- 141.51 Airport requirements.
- 141.53 Office and room facilities requirements.
- 141.55 Flight equipment requirements.
- 141.57 Maintenance facility requirements.
- 141.59 Chief flight instructor requirements.
- 141.61 Curriculum requirements: Primary flying school.
- 141.63 Curriculum requirements: Commercial flying school.
- 141.65 Curriculum requirements: Instrument flying school.
- 141.67 Curriculum requirements: Flight instructor school.

AUTHORITY: §§ 141.1 to 141.67 issued under secs. 313(a), 314, 601, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421, and 1427).

Subpart A—General

§ 141.1 Applicability.

This part prescribes the requirements for issuing airman agency certificates and associated ratings to pilot schools

and the general operating rules for the holders of those certificates and ratings.

§ 141.3 Application; issue; and renewal.

(a) An application for an original certificate and rating, for an additional rating, or for the renewal of such a certificate, under this part, is made on a form and in a manner prescribed by the Administrator. The applicant must file two copies of the proposed curriculum of the school with his application or certify that he will follow the curriculum in Appendix A, B, C, or D or in § 141.47 or § 141.49 of this chapter, as appropriate.

(b) An applicant who meets the requirements of this part for one or more school ratings is entitled to an appropriate certificate and ratings.

§ 141.5 Duration of certificates.

(a) Unless sooner surrendered, suspended, or revoked, a pilot school certificate and rating expires at the end of the twenty-fourth month after the month in which it is issued, or on the date of any change in the ownership of the school for which it was issued or renewed, whichever is earlier.

(b) The holder of a pilot school certificate may surrender it at any time by sending it to the Administrator with a letter stating that he is surrendering it.

(c) The holder of a pilot school certificate that expires or is surrendered, suspended, or revoked, shall, upon the written request of the Administrator, return it to the Administrator.

(d) A change in the name of a pilot school, without a change in ownership, does not make the certificate expire. However, the owner of the school shall, within 15 days after any change in its name, notify the Administrator of that change. He is then entitled to a new certificate with the new name and the current number and rating.

§ 141.7 Display of certificates.

Each holder of a pilot school certificate and ratings shall, upon the reasonable request of any person, show them to that person.

§ 141.9 School ratings.

The following ratings are issued under this part:

- (a) Basic ground school.
- (b) Advanced ground school.
- (c) Primary flying school for—
 - (1) Airplanes;
 - (2) Rotorcraft; or
 - (3) Gliders.
- (d) Commercial flying school for—
 - (1) Airplanes;
 - (2) Rotorcraft; or
 - (3) Gliders.
- (e) Instrument flying school.
- (f) Flight instructor school.

§ 141.11 Quality of instruction.

(a) Each certificated pilot school shall provide instruction of such quality that, of its graduates who apply within 60 days after the date they are graduated, at least 80 percent qualify for pilot ratings appropriate to the curriculum from which they were graduated.

(b) A pilot school may not graduate a student unless he has completed all of

the curriculum requirements of his course. A student may be credited, but not for more than 50 percent of the curriculum requirements, with previous pilot experience and knowledge, based upon an appropriate flight check or test by the school. Course credits may be transferred from one certificated school to another. The receiving school shall determine the amount to be transferred, based on a flight check or written test, or both, of the student. However, the student may not be credited with more than that with which he was credited at the school from which he transferred.

(c) The Administrator may, at any reasonable time, determine a school's compliance with its curriculum and the quality of its instruction by questioning, testing, or flight checking any student at that school on items that are a part of the course in which the student is enrolled and that have, according to the school schedule and records, been covered in his course. To facilitate scheduling of checks under this subsection, the school shall, at least 15 days before each graduation, notify the Administrator in writing of the name of each student that it expects to graduate.

(d) A flight check for determining quality of instruction or a school's compliance with its curriculum is based on the curriculum standards in this part. Applicants for pilot certificates or ratings are flight tested in accordance with Part 61 of this chapter.

§ 141.13 Student tests.

Each certificated pilot school shall give an appropriate written or practical test in each subject to each student who completes that subject in an approved curriculum. The school shall keep each written test, or, in the case of a practical test, a report of it, for at least one year after the end of the student's enrollment. The test shall cover such material and be of such a degree of difficulty that a student who passes it may reasonably assume that he can pass, on his first attempt, the required FAA test on that subject, for the rating he seeks.

§ 141.15 Curriculum changes.

A certificated pilot school may not change its approved curriculum unless that change is approved after it has been submitted in writing to the Administrator, setting forth the parts that are to be changed and the proposed changes. Unless the school is notified of disapproval, within 45 days after filing the proposed change, it is considered to be approved.

§ 141.17 Graduation certificates.

Each graduate of a certificated pilot school is entitled to a graduation certificate in a form prescribed by the school and acceptable to the Administrator.

§ 141.19 Authority to test graduates for pilot certificates.

(a) The Administrator may authorize a certificated pilot school to give its graduates the written or flight test, or both, for a pilot certificate and rating under Part 61 of this chapter, if it applies in writing, naming the tests it

wishes to give, and complies with paragraphs (b) to (d) of this section.

(b) To be eligible to give a private pilot flight test in an airplane to graduates of a primary flying school course, a school must—

(1) Have an approved flight training curriculum, that includes two hours of dual instruction at night, four hours of dual cross-country instruction, and six hours of solo cross-country flight;

(2) Give at least 35 hours of ground instruction on primary flight maneuvers and procedures, and a written test at the end of each phase in the flight curriculum;

(3) Show that the dual instruction in the control of an airplane solely by reference to instruments is given by certificated flight instructors who are instrument flight instructors or hold instrument ratings; and

(4) Show that at least five students enrolled in its primary flying course have passed a proficiency flight check given by an FAA inspector, at least three of which had completed the entire course, and at least two of which (may be the same students) have been checked during their training course.

(c) To be eligible to test its graduates for any certificate other than a private pilot certificate, the school must submit, with its application, complete information on the proposed training and testing.

(d) The chief flight instructor and each designated check pilot of a school that applies under this section must pass a standardization test given by an FAA inspector before the school begins training for the purposes of this section.

(e) Each school that is authorized to give tests under this section shall send the student's application for a pilot certificate or rating and certified and complete records of his training and performance on the flight tests and ground school tests to the supervisory FAA office for review and issue of the certificate or rating sought.

§ 141.21 Records.

Each certificated pilot school shall keep a current, accurate, and individual record of each student's participation and accomplishments in the course for which he is enrolled, including a chronological log of his instruction, attendance, subjects covered, tests, and test grades. When the student completes the course or is graduated, an authorized representative of the school shall certify the record.

§ 141.23 Change of location.

(a) The holder of a pilot school certificate may not change the school's location, unless the change is approved in advance.

(b) If an inspection of the proposed location shows that the facilities are satisfactory, and the school meets the original certification requirements, it is entitled to a new certificate for the new location.

(c) If the inspection shows that the facilities at the new location are not satisfactory, the school is so notified and must immediately act to eliminate the deficiencies.

§ 141.25 Inspections.

Each applicant for a certificate under this part must, and each holder of such a certificate shall, upon reasonable request, allow the Administrator to inspect its personnel, facilities, equipment, and records.

§ 141.27 Maintenance of personnel, facilities, and equipment.

Each certificated pilot school shall maintain personnel, facilities, and equipment at least equal in quality and quantity to the standards currently required for the issue of the certificate and ratings that it holds.

§ 141.29 Advertising limitations.

A certificated pilot school may not make any statement relating to it that is false or designed to mislead any person contemplating enrollment in the school. Any advertising that indicates the school is approved must clearly differentiate between courses that have been approved and those that have not.

Subpart B—Ground Schools

§ 141.41 Classroom requirements.

An applicant for a ground school rating under this part must meet the following classroom requirements:

(a) At least 80 square feet of floor area, plus at least 15 square feet for each additional student over five.

(b) Heat and ventilation in accordance with public health laws.

(c) Enough light to allow a person with normal eyesight to study or read without eyestrain.

§ 141.43 Equipment requirements.

An applicant for a ground school rating under this part must have the following classroom equipment:

(a) Basic or advanced ground school:

(1) For each student, a desk-chair, chair and desk, or chair and table space (but not table-arm chairs) for work such as laying out courses on aeronautical charts.

(2) A blackboard with at least 12 square feet of usable surface.

(b) Basic ground school:

(1) Texts and related materials on the regulations in this chapter, meteorology, aerial navigation, radio (as used for airport traffic control, flight assistance services, general service and the operation of aircraft and aircraft engines), and pertinent operational data at the private pilot level.

(2) Illustrative, explanatory, and demonstration aids and materials representative of those that a private pilot needs in actual piloting operations, such as radio facility charts, aeronautical charts, computers, and the Airman's Guide.

(c) Advanced ground school:

(1) Text and related source materials covering the subjects named in paragraph (b) of this section and the navigation of aircraft by radio aids.

(2) Models, mockups, cutaways, and classroom-size or lecture-size blueprints and diagrams covering the operation and function of instruments and equipment required under Part ____ of this chapter [Present Part 43] and those required

under Parts ____ and ____ of this chapter [Present Parts 3, 5, and 6] as they relate to the course being taught.

§ 141.45 Instructor requirements.

(a) An applicant for a ground school rating under this part must have at least one principal instructor who is regularly available for instructing or supervising each scheduled class subject and who holds a ground instructor certificate with a rating for each subject in the school curriculum. Each instructor other than the principal instructor must have a ground instructor certificate with an appropriate rating for each subject that he teaches.

§ 141.47 Curriculum requirements: Basic ground school.

An applicant for a basic ground school rating under this part must adopt the following as a minimum curriculum or submit one of equal or higher standard for approval. In either case it must provide at least 50 hours of classroom instruction in the following subjects, and require a passing grade on a test on each subject of each student taking the subject:

(a) Instruction in section ____ of this chapter [Present § 3.20(a) (1), (2), and (3)] and Parts 61, ____, ____, and ____ of this chapter [Present Parts 1, 43, and 60].

(b) Instruction in the following meteorological subjects:

(1) Weather recognition.
(2) Icing.
(3) Fog.
(4) Frontal characteristics, with particular emphasis on thunder storms.
(5) General cloud formations and their relationship to weather characteristics.

(6) Weather maps and symbols.
(7) Teletype sequences and symbols.
(8) Elementary weather forecasting.
(9) Pressure areas and their characteristics, including motion of air masses (wind systems).

(10) Significance of isobaric patterns.
(11) Winds aloft.
(12) Humidity-temperature-dewpoint relationships and significance to the pilot.

(13) Precipitation.
(14) Practical application of meteorological knowledge to safe flying practices.

(15) Services and assistance available from the United States Weather Bureau.

(c) Instruction in the following on aerial navigation and radio:

(1) Navigation methods, including pilotage; dead reckoning; and basic radio aids to navigation, including elementary radio orientation.

(2) Navigation instruments commonly used.

(3) Basic use of computers.
(4) Proper use of flight plans.

(5) Proper use of published aids such as the Flight Information Manual, the Airman's Guide, and Notams.

(6) Explanation of radio aids to flight.
(7) Proper use of radio, including voice procedure and phraseology.

(8) Flight assistance services.
(d) Instruction in the following general service and safety practices:

(1) Care of aircraft, including pre-flight inspection procedures, general safety precautions, and explanation of preventive maintenance, repair, and required inspections.

(2) Care of engines, including pre-flight inspection procedures, fuel requirements, proper starting, warmup and shutdown procedures; explanation of preventive maintenance, repair, required inspection, and use of operating manuals; and the functions, limitations, and characteristic errors of instruments required under Part _____ of this chapter [Present Part 43].

(3) Flight safety practices, including operation under conditions of high altitude, extreme temperatures, gross weight, icing (wing ice, propeller ice, and carburetor ice); adverse surface conditions (rough, soft, and slippery); turbulent air (mountainous and canyon effects, and surface obstruction and thermal effects); day and night marginal visibility; radio communications failure; low fuel supply; aerodynamic effect of frost or snow on airfoils; maximum range versus maximum endurance operation; proper tiedown or securing of aircraft; emergency assistance and lost procedures; use of landing lights and flares; obstructions to flight, such as antennae, poles, and birds; and procedures when operating unfamiliar aircraft.

§ 141.49 Curriculum requirements: Advanced ground school.

An applicant for an advanced ground school rating under this part must adopt the following as a minimum curriculum or submit one of equal or higher standard for approval. In either case, it must provide at least 150 hours of classroom instruction in the following subjects, and require a passing grade on a test on each subject of each student taking that subject:

(a) Instruction in the regulations listed in § 141.47, in enough detail and thoroughness to give the student the information he may need as a commercial pilot with an unrestricted certificate, plus instruction on Part ____ of this chapter [Present Part 42] and particular stress on airport and air route traffic control procedures and operations under them.

(b) Instruction in the meteorological subjects listed in § 141.47 of more detail and thoroughness of instruction than that given in a basic ground school, including the cause and effect aspects of weather in relation to safe and successful flight operations.

(c) Instruction in pilotage and dead reckoning techniques and radio aids to navigation, including a practical demonstration to provide familiarization with L/MF and VOR/VHF techniques and preparing and using IFR flight plans.

(d) Instruction in the servicing and safety practices listed in § 141.47(d), and—

(1) Other servicing and safety practices, theory of flight, lift-gravity-thrust-drag forces, characteristics of air as a fluid mass, and performance characteristics of aircraft including ground effect, design, gust load safety factors, and operating limitations; and

(2) Care and maintenance of equipment, including pressure, quantity, and rate instruments; radio and electronics equipment; flotation devices; fire extinguishers; safety belts; windshields, windows, and canopies; emergency exits; and parachutes.

Subpart C—Flying Schools

§ 141.51 Airport requirements.

(a) An applicant for a flying school rating under this part must provide an airport with at least one runway or take-off area that allows its training aircraft to make a normal takeoff at full gross weight—

(1) Under calm wind (not more than five miles per hour) conditions and temperatures equal to the mean high temperature for the hottest month of the year in the operating area;

(2) Clearing all obstacles in the take-off flight path by at least 50 feet;

(3) With the powerplant operation and landing gear and flap operation, if applicable, recommended by the manufacturer; and

(4) With smooth transition from lift-off to the best rate of climb speed without exceptional piloting skills or techniques.

(b) The standards listed in paragraph (a) of this section apply to outlying fields used for training purposes, except those used for training in the principles and procedures for coping with critical situations.

§ 141.53 Office and room facilities requirements.

An applicant for a flying school rating under this part must have a permanent office, rest room, and ready room facilities at the airport or base of operations. Facilities provided under this section must conform to local building, sanitation, and health codes. Ready rooms provided under this section must have chairs, clothesracks or lockers, and bulletin boards.

§ 141.55 Flight equipment requirements.

(a) An applicant for a flying school rating under this part must have the aircraft described in this section.

(b) Each airplane used for flight instruction of students enrolled in a flying course must be certificated under Part ____ or ____ of this chapter [Present Parts 3, 4a, or 4b], maintained as provided in Part ____ of this chapter [Present Part 43], registered in the name of the school or operated under a lease, and have the equipment and performance characteristics appropriate to its curriculum.

(c) Each applicant must have at least one airplane for each 15 students (or fraction thereof) enrolled in the flight course and enough airworthy airplanes available at the training location for the flight training periods.

(d) Each applicant for a commercial course must have at least two types of airplanes that significantly differ in performance, flight characteristics, and operating requirements. At least one of them must have a demonstrated cruising speed of at least 120 miles per hour using METO power. Airplanes used in the

radio navigation or instrument part of the curriculum must have the minimum instruments and radio equipment required by § ____ of this chapter [§ 43.30(c)] and a gyroscopically operated pitch indicator.

(e) Each training aircraft must have available to the trainee, in the aircraft, an appropriate pilot's training checklist containing essential operational data on prestarting procedure; warmup procedure; pretakeoff procedure; cruising flight procedure; prelanding procedure; shutting down procedure; and emergency procedure for critical flight situations involving aircraft or engine troubles; flight configurations and operational speeds for severe turbulence; and single-engine operation, if appropriate.

(f) If a school that applies for a commercial or instrument rating, or both, does not have a simulated flight training device available to it that is acceptable to the Administrator, it must give all of its required instrument flight training in aircraft.

§ 141.57 Maintenance facility requirements.

(a) An applicant for a flying school rating under this part must provide facilities necessary to maintain, in a continuously airworthy condition, the minimum flight equipment required by this subpart. It may provide those facilities by ownership, rental, lease, or other approved arrangement.

(b) In addition, such a school must have enough certificated mechanics readily available to maintain its aircraft used for flight instruction, unless other approved arrangements are made.

§ 141.59 Chief flight instructor requirements.

(a) Each flight course must be under the direct supervision of a chief flight instructor designated by the school. A chief instructor may serve as a chief instructor for each course for which he is qualified. Each chief instructor must have a good record as a pilot and flight instructor and—

(1) For a primary flying school, must—

- (i) Be at least 21 years of age;
- (ii) Have at least two years of experience as an active certificated flight instructor immediately before the date he is designated as chief instructor;
- (iii) Have at least 500 hours as a certificated flight instructor, including at least 50 hours in the year before the date he is designated as chief instructor; and
- (iv) Have at least 1,000 hours as pilot in command;

(2) For a commercial flying school, or flight instructor flying school, must—

- (i) Be at least 21 years of age;
- (ii) Have at least three years of experience as an active certificated flight instructor immediately before the date he is designated as chief instructor;
- (iii) Have at least 1,000 hours as a certificated flight instructor including at least 100 hours in the year before the date he is designated as chief instructor;
- (iv) In the case of a commercial flying school, have an instrument rating; and

(v) Have at least 2,000 hours as pilot in command; and

(3) For an instrument flying school, must—

- (i) Be at least 21 years of age;
- (ii) Have at least two years of experience, immediately before the date he is designated as chief instructor, as a certificated instrument flight instructor;
- (iii) Have at least 100 hours of instrument flight time under actual or simulated instrument flight conditions;
- (iv) Have at least 250 hours as an instrument flight instructor; and
- (v) Have at least 1,000 hours as pilot in command.

(b) Each school shall assign the following duties to its chief instructors, to be accepted in writing or by endorsing the assignment:

- (1) Certifying training reports, graduation certificates, and official recommendations of the school.
- (2) Maintaining adequate instructional standards.
- (3) Effective scheduling of aircraft, instructors, and students.
- (4) Maintaining student progress and accomplishment records.
- (5) Conducting competence and standardization checks of instructors.
- (6) Conducting student proficiency stage checks.
- (7) Maintaining liaison with FAA in applying the techniques, procedures, and standards of the school.

(c) The school shall notify the Administrator, in writing, of any change in the designation of a chief instructor.

§ 141.61 Curriculum requirements: Primary flying school.

(a) An applicant for a primary flying school rating under this part must provide—

(1) For airplanes, at least 35 hours of flight time (or 30 hours of flight time and additional specialized approved instruction) including the training prescribed in Appendix A to this part and a demonstration of student proficiency and knowledge.

(2) For rotorcraft, at least 35 hours of flight time; and

(3) For gliders, at least eight hours of flight time.

(b) Student progress checks may be applied toward completing course hour requirements.

§ 141.63 Curriculum requirements: Commercial flying school.

(a) An applicant for a commercial flying school rating under this part must provide—

(1) For airplanes, at least 160 hours of flight time, including at least 100 hours of solo flight of which at least 20 are solo cross-country, the training described in Appendix B to this Part, and a demonstration of student proficiency;

(2) For rotorcraft, at least 160 hours of flight time; and

(3) For gliders, at least 20 hours of flight time.

(b) Student progress checks may be applied toward completing course-hour requirements.

§ 141.65 Curriculum requirements: Instrument flying school.

(a) An applicant for an instrument flying school rating under this part must provide at least 30 hours of instrument flying instruction, of which at least 20 hours are in actual flight; and a total of at least 30 hours of ground instruction on the regulations in this chapter, navigation, meteorology, and radio orientation and procedures as applicable to instrument flying. For airplanes, the required hours of instruction must include the training described in Appendix C to this Part and a demonstration of student proficiency and knowledge.

(b) Student progress checks may be applied toward completing course-hour requirements.

§ 141.67 Curriculum requirements: Flight instructor school.

(a) An applicant for a flight instructor school rating under this part must provide at least 25 hours of flying devoted exclusively to the science of flight instruction and at least 40 hours of theoretical instruction in the fundamentals of giving flight instruction and the analysis and performance of flight technique. For airplanes, the required hours of instruction must include the training described in Appendix D to this Part and a demonstration of student proficiency and knowledge.

(b) Student progress checks may be applied toward completing course-hour requirements.

PART 141—DISTRIBUTION TABLE

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¹ Not a rule.

APPENDIX A—FLIGHT TRAINING—PRIMARY FLIGHT SCHOOLS

The training that must be included in the required hours of flight time under § 141.61 is as follows:

(a) *Phase I—basic flying*—(1) *Airplane equipment familiarization.* (i) Use of cockpit controls.

(ii) Fuel system operation, octane required.

(iii) Fire extinguisher, first aid kit, etc.

(2) *Preflight preparatory procedures.* (i) Use of checklist.

(ii) Safety principles for engine.

(iii) Hand signals for ground operations.

(iv) Equipment checks.

(v) Local taxiing and traffic rules.

(3) *Taxiing and parking.* (i) Principles of and safety practices in taxiing and parking, including engine operation and speed control under typical wind and surface conditions.

(ii) Taxiing and parking operations, including airplane response to engine and flight controls under typical wind and surface conditions.

(iii) (If seaplane training.) Principles, procedures, and operations on water bodies (calm and choppy), involving taxiing, sailing, beaching, docking, and mooring.

(4) *Takeoffs and landings.* (i) Principles and procedures for obtaining ground path control; takeoff and climbouts at the best angle of climb speed, approaches at recommended speed, and flared landings, transition to touchdown without gear side loads.

(ii) Operations on hard surfaced runways.

(iii) Operations on sod surfaced areas.

(iv) Operations at controlled airports.

(v) Operations at uncontrolled airports.

(vi) Operations in heavy local traffic.

(vii) Operations in crosswinds.

(viii) Operations in gusty winds.

(ix) Landings using power-on approaches, and slips.

(x) (If seaplane training.) Principles, procedures, and operations involving takeoffs and landings.

(5) *Straight and level flight.* (i) Principles for attitude maintenance in gusty air, momentary deviations, etc.

(ii) Maintenance of airplane attitude by visual reference (wing tips to horizon, etc.).

(iii) Maintenance of flight path over ground.

(6) *Turns.* (i) Flight control functions.

(ii) Principles in overbanking tendencies.

(iii) Principles for obtaining and maintaining a desired bank (ref. to wing tips), and a desired altitude (angle of attack, power, etc.).

(iv) Transitions to and maintenance of desired banks and altitudes.

(7) *Climbs and glides.* (i) Principles of attaining and maintaining a normal angle in climbs and descents.

(ii) 10°-30° banked turns.

(iii) 30°-60° banked turns.

(iv) Spirals with bank at least 45°, through 720°-1080°.

(8) *Stalls.* (i) Principles for detection of incipient stalls and effecting recovery to straight and level flight with minimum loss of altitude.

(ii) Stalls and recoveries from takeoff and departure configurations.

(iii) Stalls and recoveries from approach and landing configurations.

(iv) Stalls and recoveries from accelerated maneuvering.

(v) Fully developed stalls and recoveries, including correct power usage to level flight.

(9) *Flight at minimum controllable airspeed (slow flight).* (i) Principles for establishing and maintaining slow flight.

(ii) Stabilized slow flight in turns at constant altitude.

(iii) Stabilized slow flight in turning climbs and descents.

(iv) Effects of power usage during slow flight.

(10) *Integrated instrument instruction.* Dual instruction in attitude control of airplanes solely by reference to instruments, integrated with the primary dual instruction prescribed in subdivisions (5), (6), (7), (8), and (9) of this subparagraph.

(b) *Phase II—Navigational and critical situations—*(1) *Pattern and track flying.* (1) Principles for establishing and maintaining a track over the ground.

(ii) Constant radius turns about a point.

(iii) "S"s around pylons.

(iv) "S" turns across a road.

(v) Making good a desired track for a prolonged period (traffic patterns, rectangular areas, etc.).

(2) *Emergencies and critical situations.* (1) Principles and safe flying practices involved, when encountering items below:

(a) Being lost.

(b) Low on fuel.

(c) Turbulent air.

(d) Adverse flight visibility conditions.

(e) Radio station shutdowns.

(f) Motor trouble.

(g) Loss of performance due to high altitudes, high temperatures, downdrafts in mountainous terrain.

(h) Instrument/communication/navigation/equipment trouble.

(i) Icing conditions (carburetor, wings, propeller).

(3) *Small, soft, and high/altitude temperature field operations.* (1) Principles and safe flying practices for effecting takeoffs and landings, climbout and approach flight plans.

(ii) Takeoffs and landings at small fields (including operation over obstacles).

(iii) Takeoffs and landings on soft surfaces.

(iv) Takeoffs and landings under conditions of high density/operational altitudes.

(4) *Cross-country flying (5 hours solo minimum).* (1) Principles and safe flying practices for preflight preparations, operations within airplane's operational limitations, use of FAA facilities, and compliance with Parts 43, 60, and 62 of this chapter.

(ii) Loading of airplane.

(iii) Weather information.

(iv) Facilities to be used.

(v) Operations to strange airports of varying size, altitudes, traffic conditions, etc.

(5) *Radio.* (i) Airport traffic control procedures.

(ii) Preparing, filing, and closing flight plans.

(iii) Use of radio aids to navigation.

(c) *Minimum total course times.* (1) Flight time, 35 hours.

(2) Ground instruction time, 8 hours, 45 minutes.

(d) *Progress checks.* (1) Solo.

(2) Basic flying phase.

(3) Navigational and critical situations phase.

(4) Final (for FAA certificate).

APPENDIX B—FLIGHT TRAINING—COMMERCIAL FLYING SCHOOLS

The training that must be included in the required hours of flight time under § 143.63 is as follows:

(a) *Phase I—basic flying—*(1) *Aircraft equipment familiarization and procedures for control and use.* (i) Principles and procedures for control and use of flight force(s) effects on wing tail surface, flight controls and for control and use of power effects through mixture, carburetor heat, etc.

(ii) Use of cockpit controls.

(iii) Fuel system operation, octane required.

(iv) Fire extinguisher, first aid kit, etc.

(2) *Preflight preparatory procedures.* (i) Principles involved in each preparatory procedure.

(ii) Use of checklist.

(iii) Safety principles for engine.

(iv) Hand signals for ground operations.

(v) Equipment checks.

(vi) Local taxing and traffic rules.

(3) *Taxiing and parking.* (i) Principles and safety practices in taxiing and parking, including engine operation and speed control under typical wind and surface conditions.

(ii) Taxiing and parking operations, including airplane response to engine and flight controls under typical wind and surface conditions.

(iii) (If seaplane training.) Principles, procedures, and operations on water bodies (calm and choppy), involving taxiing, sailing, beaching, docking, and mooring.

(iv) (If seaplane training.) Principles, procedures, and operations on water subject to tidal or current action involving sailing and beaching, docking, and mooring.

(4) *Takeoffs and landings.* (1) Principles and procedures for obtaining ground path control; takeoff and climbouts at the best angle of climb speed, and flared landings, transition to touchdown without gear side loads.

(ii) Operations on hard surfaced runways.

(iii) Operations on sod surfaced areas.

(iv) Operations at controlled airports.

(v) Operations at uncontrolled airports.

(vi) Operations in heavy local traffic.

(vii) Operations in crosswinds.

(viii) Operations in gusty winds.

(ix) Landings using power-on approaches and slips.

(x) (If seaplane training.) Principles and procedures and operations involving takeoffs and landings.

(xi) (If seaplane training.) Operations from water affected by tide and current.

(5) *Straight and level flight.* (1) Principles for attitude maintenance in gusty air, momentary deviations, etc.

(ii) Maintenance of airplane attitude by visual reference (wing tips to horizon, etc.).

(iii) Maintenance of flight path over ground.

(6) *Turns.* (1) Principles of and familiarization with aerodynamic forces involved and available for turning purposes under full load and varying power conditions.

(ii) Flight control functions.

(iii) Principles in overbanking tendencies.

(iv) Principles for establishing and maintaining a desired bank (ref. to wing tips), and a desired altitude (angle of attack, power, etc.).

(v) Transitions to and maintenance of desired banks and altitudes.

(7) *Climbs and glides.* (1) Principles of establishing and maintaining a normal angle in climbs and descents.

(ii) 10°–30° banked turns.

(iii) 30°–60° banked turns.

(iv) Spirals with bank at least 45° through 720°–1080°.

(v) Use of power and speed control to maintain preassigned rates of descent and ascent.

(8) *Stalls.* (1) Principles for detection of incipient stalls and effecting recovery to straight and level flight with minimum loss of altitude.

(ii) Stalls and recoveries from takeoff and departure configurations.

(iii) Stalls and recoveries from approach and landing configurations.

(iv) Stalls and recoveries from accelerated maneuvering.

(v) Fully developed stalls and recoveries, including correct power usage, to level flight.

(9) *Flight at minimum controllable airspeed (slow flight).* (1) Principles for establishing and maintaining slow flight.

(ii) Stabilized slow flight in turns at constant altitude.

(iii) Stabilized slow flight in turning climbs and descents.

(iv) Effects of power usage during slow flight.

(b) *Phase II—Navigational and critical situations—*(1) *Pattern and track flying.* (1) Principles for establishing and maintaining a track over the ground.

(ii) Constant radius turns about a point.

(iii) "S"s around pylons.

(iv) "S" turns across a road.

(v) Making good a desired track for a prolonged period (traffic patterns, rectangular areas, etc.).

(2) *Emergencies and critical situations.* (1) Principles and safe flying practices involved when encountering items below:

(a) Being lost.

(b) Low on fuel.

(c) Turbulent air.

(d) Adverse flight visibility conditions.

(e) Radio station shutdowns.

(f) Motor trouble.

(g) Loss of performance due to high altitudes, high temperatures, downdrafts in mountainous terrain.

(h) Instrument/communication/navigation/equipment trouble.

(i) Icing conditions (carburetor, wings, propeller).

(ii) Principles and procedures for determining and executing a course of action for forced landings that, if carried through, would most likely result in a safe landing with minimum, if any, damage to the airplane or injury to occupants.

(3) *Small, soft and high altitude/temperature field operations.* (1) Principles and safe flying practices for effecting takeoffs and landings, climbout and approach flight plans.

(ii) Takeoffs and landings at small fields (including operation over obstacles).

(iii) Takeoffs and landings on soft surfaces.

(iv) Takeoffs and landings under conditions of high density/operational altitudes.

(4) *Cross-country flying and radio navigation (20 hours).* (1) Principles and safe flying practices for preflight preparations, operations within airplane's operational limitations, use of FAA facilities and compliance with Parts ---- and ---- of this chapter [§ 43.60] and Part 320, "Notification and Reporting of Aircraft Accidents and Overdue Aircraft," issued by the Civil Aeronautics Board, and which is on sale at the Government Printing Office for 5 cents.

(ii) Loading of airplanes.

(iii) Weather information.

(iv) Facilities to be used.

(v) Operations to strange airports of varying size, altitudes, traffic conditions, 350 miles distant, etc.

(vi) Operations to airports in which flight plans are filed, followed, and closed, one or more radio aids to navigation are used; and dead reckoning navigation employed. Procedures for operation in Air Defense Identification Zones.

(5) *Basic instrument flying (minimum 10 hours, 5 hours instrument instruction).* The specified 10 hours of instrument training shall be given by a rated instrument flight instructor; the remaining 5 hours may be given by the holder of a flight instructor certificate with an airplane rating.

(i) Principles and procedures for maintaining and controlling airplane flight altitudes and speeds (solely by reference to instruments), and maintaining flight within the airplane's operational limitations.

(ii) Operations using a gyroscopically operated bank and direction indicator, a gyroscopically operated rate of turn indicator, a gyroscopically operated pitch indicator, a sensitive altimeter, and a sweep second clock.

(iii) Principles and procedures for coping with turbulent air conditions, including recommended airspeed, airplane configuration and power settings.

(iv) Operations (solely by reference to instruments) in turbulent air.

(6) *Night flying (minimum 5 hours) (10 takeoffs and landings).* (1) Principles and

procedures for conduct of night flights from takeoff to destination and landing, including procedures for coping with critical and including emergency situations.

(ii) Operations at night (during the period from one hour after sunset to one hour before sunrise) must include at least 10 takeoffs and landings to complete stops with student as pilot in command and sole manipulator of the controls.

(7) *Transition to and operation of representative current type transportation airplanes (5 hours solo minimum).* (i) Principles and procedures to be followed in making a transition from a familiar type airplane to one with significantly different flight performance and operating characteristics. Includes determination of the correct fuel consumption and use of fuel system tanks, selector(s) and indicator(s), use of flaps for takeoff and landing under various configurations and conditions of loading, loading to be within c.g. limits, operational recommended speeds and limitations for the engine and airplane, procedures for use of communication, navigation, and flight instrumentation equipment, and procedures to be used under the emergency situations and for normal gear extension (if applicable).

(ii) Operation of different type transportation airplanes at gross weight, which will include preflight procedures, takeoffs and departures, inflight maneuvers at minimum controllable airspeed, the design maximum structural cruising speed, best angle and rate of climb airspeed(s) and configuration(s); approaches and landing using recommended approach speed and configuration, and post-flight procedures.

(c) *Minimum total course times.* (1) Flying time, 160 hours.

- (i) Solo flight, 100 hours.
- (ii) Cross-country solo, 20 hours.
- (iii) Ground instruction, 40 hours.
- (iv) Progress checks. (1) Solo.
- (v) Basic flying phase.
- (vi) Navigation and critical situations phase:

- (i) VFR operations.
- (ii) Basic instrument flying.
- (iii) Night flying.
- (iv) Final (for FAA certificate).

APPENDIX C—FLIGHT TRAINING—INSTRUMENT FLYING SCHOOL

The training that must be included in the required hours of instruction under § 141.65 is as follows:

(a) *Phase I—Basic instrument flying—(1) Straight and level flight.* (i) Principles, procedures, and operating limitations for all flight instruments for control of attitude, altitude, direction, and speed.

(ii) Smooth air operation at cruising speed.

(iii) Turbulent air operation at recommended rough airspeed.

(2) *Turns.* (i) Principles, procedures, and operating limitations for control of rate of turn to predetermined headings (including timed turns).

(ii) Smooth air operation at cruising speed.

(iii) Turbulent air operation at recommended rough airspeed.

(3) *Climbs, descents, and spirals.* (i) Principles, procedures, and operating limitations for control of rate of climb and descent to predetermined altitudes.

(ii) Smooth air operation at recommended best rate of climb and glide speeds and airplane configurations.

(iii) Same as (ii) of this subdivision, but in rough air.

(4) *Stalls.* (i) Principles and procedures for detection of and recovery from partial and full stalls.

(ii) Stall detection and recoveries.

(iii) Full stall recoveries.

(5) *Recovery from unusual attitudes.* (i) Principles and procedures for coping with unusual attitudes and for critical engine

inoperative situations on multiengine airplanes (including effecting recoveries within operating and structural limitations).

(ii) Recoveries to level flight attitudes and speeds.

(iii) Operation with critical engine inoperative (multiengine airplanes only).

(b) *Phase II—IFR communications, navigation and approaches—(1) Estimation at arrival times.* (i) Principles and procedures for preparing a complete flight plan and the correct computation of estimated arrival times over check points, at destination, and at an alternate airport.

(ii) Flight planning. (Weather data, navigational procedures, airplane performance data, flight charts, approach procedures etc.).

(iii) Flight from point to point.

(2) *Tuning radio equipment.* (i) Principles and procedures for selection of frequencies, use of volume control, use of voice and range filters, use of dual equipment—when installed.

(ii) Use of equipment in flight.

(3) *Orientation.* (i) Principles and procedures for orienting on a range leg, or radial, and identification of position.

(ii) Range orientation and identification from an unknown position.

(4) *Following a range leg or radial.* (i) Principles and procedures for aligning with and maintaining flight path and altitude along range leg or radial.

(ii) Range leg or radial alignment and following.

(5) *Locating range stations.* (i) Principles and procedures for locating and identifying arrival over station.

(ii) Location and identification of station.

(6) *Instrument approach procedures.* (i) Principles and procedures for execution of the correct approach procedure for the station and airport involved. (Includes familiarization with radio facility charts, radio range charts, and terminal charts.)

(ii) Execution of approaches to standard minimums for airport involved. (Also to 500 feet and one mile at some other airport if local airport has higher minimums.)

(7) *Missed approach procedures.* (i) Principles and procedures for execution of the correct missed approach procedures.

(ii) Execution of missed approach procedures for airport involved.

(8) *Air traffic control procedures.* (i) Familiarization with and procedures for compliance with ATC clearances and/or instructions, including holding and emergency procedures.

(ii) Receipt and execution of ATC clearances and/or instructions.

(c) *Minimum total course times.* (1) Ground instruction, 30 hours.

(2) Flying time (20 hours in flight), 30 hours.

(d) *Progress checks.* (1) Phase I—Basic instrument flying.

(2) Phase II—IFR communications, navigation, and approaches.

APPENDIX D—FLIGHT TRAINING—FLIGHT INSTRUCTOR SCHOOL

The training that must be included in the required hours of instruction under § 141.67 is as follows:

(a) *Flight portion, 25 hours of flying—(1) Phase I—performance skills.* (i) All items and maneuvers listed in Part 61 of this chapter for private, commercial, and flight instructor flight tests; all items and maneuvers listed in Appendices A and B to this part; lazy 8's and chandelles.

(2) *Phase II—instructional skills.* (i) Development of methods, skills, and techniques of imparting knowledge, skills, etc., to students in all of the items and maneuvers of Phase I.

(b) *Ground instruction portion, 40 hours—(1) Fundamentals of flight instruction.* (i) Basic learning characteristics.

(ii) Determination of objectives, or aims.

(iii) Instructional management (preparation and execution).

(iv) Teaching methods and techniques.

(v) Evaluation techniques.

(2) *Analysis of flight maneuvers and flight techniques.* (i) Theory of flight.

(ii) Control functions and effects.

(iii) Common student errors—causes and remedies.

(iv) Common flight instructor deficiencies—causes and remedies.

(v) Principles of safety.

PART 143—GROUND INSTRUCTORS [NEW]

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| 143.1 | Applicability. |
| 143.3 | Application and issue. |
| 143.5 | Temporary certificate. |
| 143.7 | Duration of certificate. |
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| 143.11 | Knowledge requirements. |
| 143.13 | Cooperation during inspections and tests. |
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| 143.19 | Recent experience. |
| 143.21 | Display of certificate. |
| 143.23 | Change of address. |

AUTHORITY: §§ 143.1 to 143.23 issued under secs. 313(a), 314, 601, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421, and 1427).

§ 143.1 Applicability.

This part prescribes the requirements for issuing ground instructor certificates and associated ratings and the general operating rules for the holders of those certificates and ratings.

§ 143.3 Application and issue.

(a) An application for a certificate and rating, or for an additional rating, under this part, is made on a form and in a manner prescribed by the Administrator. However, a person whose ground instructor certificate has been revoked may not apply for a new certificate for a period of one year after the effective date of the revocation unless the order of revocation provides otherwise.

(b) An applicant who meets the requirements of this part is entitled to an appropriate certificate with ratings naming the ground school subjects that he is authorized to teach.

§ 143.5 Temporary certificate.

A certificate or rating effective for a period of not more than 90 days may be issued to a qualified applicant, pending the issue of the certificate or rating for which he applied.

§ 143.7 Duration of certificate.

(a) A certificate or rating issued under this part is effective until it is surrendered, suspended, or revoked.

(b) The holder of a certificate that is suspended, revoked, or expired shall, upon the Administrator's request, return it to the Administrator.

§ 143.9 Eligibility requirements: General.

To be eligible for a certificate under this part, a person must be at least 18 years of age, be of good moral character, and comply with § 143.11.

§ 143.11 Knowledge requirements.

Each applicant for a ground instructor certificate must show his practical and theoretical knowledge of the subject for which he seeks a rating by passing a written test on that subject.

§ 143.13 Cooperation during inspections and tests.

Each applicant for a ground instructor certificate, and each person who holds such a certificate, shall, upon request, cooperate fully during any inspection or test made of him by the Administrator.

§ 143.15 Tests: General procedures.

(a) Tests prescribed by or under this part are given at times and places, and by persons, designated by the Administrator.

(b) The minimum passing grade for each test is 70 percent.

§ 143.17 Re-testing after failure.

An applicant for a ground instructor rating who fails a test under this part may apply for re-testing—

(a) After 30 days after the date he failed that test; or

(b) Upon presenting a statement from a certificated ground instructor, rated for the subject of the test failed, certifying that he has given the applicant at least five hours additional instruction in that subject and now considers that he can pass the test.

§ 143.19 Recent experience.

The holder of a ground instructor certificate may not perform the duties of a ground instructor unless, within the 12 months before he intends to perform them—

(a) He has served for at least three months as a ground instructor; or

(b) The Administrator has determined that he meets the standards prescribed in this part for the certificate and rating.

§ 143.21 Display of certificate.

Each holder of a ground instructor certificate shall keep the certificate readily available to him while instructing and shall present it for inspection upon the request of his student, school officer, or the Administrator.

§ 143.23 Change of address.

Within 30 days after any change in his permanent mailing address, the holder of a ground instructor certificate shall notify the Federal Aviation Agency, Airman Certification Branch, Oklahoma City, Oklahoma, in writing, of his new address.

PART 143—DISTRIBUTION TABLE

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| 51.3 ----- | 143.21 | 51.11a ----- | 143.23 |
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AUTHORITY: §§ 145.1 to 145.79 issued under secs. 313, 314, 601, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421, and 1427).

Subpart A—General**§ 145.1 Applicability.**

(a) This part prescribes the requirements for issuing repair station certificates and associated ratings to facilities for the maintenance and alteration of airframes, powerplants, propellers, or appliances, and prescribes the general operating rules for the holders of those certificates and ratings.

(b) A certificated repair station located in the United States is called a "domestic repair station". A repair station located outside of the United States is called a "foreign repair station".

§ 145.3 Certificate required.

No person may operate as a certificated repair station without, or in violation of, a repair station certificate. In addition, an applicant for a certificate may not advertise as a certificated repair station until the certificate has been issued to him.

§ 145.11 Application and issue.

(a) An application for a repair station certificate and rating, or for an additional rating, is made on a form and in

a manner prescribed by the Administrator, and submitted with duplicate copies of—

(1) Employment summaries (providing the information required by § 145.43) for the chief inspector and other personnel having technical responsibility for final airworthiness determinations before releasing an article to service, and in a case where the privilege of final airworthiness determination is retained by the management officials of the station, an employment summary for each of those officials;

(2) Its inspection procedures manual;

(3) A list of the maintenance functions to be performed for it, under contract, by another agency under § 145.49 or Appendix A; and

(4) In the case of an applicant for a propeller rating (class 2) or any accessory rating (class 1, 2, or 3), a list, by type or make, as applicable, of the propeller or accessory for which he seeks approval.

(b) An applicant who meets the requirements of this part is entitled to a repair station certificate with appropriate ratings prescribing such operations specifications and limitations as are necessary in the interests of safety.

§ 145.13 Certification of foreign repair stations: special requirements.

Before applying under § 145.11, an applicant for a foreign repair station certificate must notify the FAA office having jurisdiction over the area in which the applicant is located of his intention to so apply and send that office a statement of his reasons for wanting a repair station at his place of business. In addition to the information required by § 145.11, the applicant must furnish two copies of a suitably bound brochure, including a physical description of his facilities (with photographs), a description of his inspection system, an organizational chart, the names and titles of managing and supervisory personnel, and a list of services obtained under contract, if any, with the names of the contractors and the types of services they perform.

§ 145.15 Change or renewal of certificates.

(a) Each of the following requires the certificate holder to apply for a change in a repair station certificate, on a form and in the manner prescribed by the Administrator:

(1) A change in the location or housing and facilities of the station.

(2) A change in the officials responsible for overall management of the station or of the persons responsible for releasing items from it.

(3) A change in authorized signatures.

(4) A request to revise or amend a rating.

(b) If the holder of a repair station certificate sells or transfers its assets, the new owner must apply for an amended certificate, in the manner prescribed in § 145.11 and, if applicable, § 145.13.

(c) A person requesting renewal of a foreign repair station certificate shall, within 30 days before his current cer-

tificate expires, send the request to the FAA office having jurisdiction over the station. If he does not make the request within that period, he must follow the procedure prescribed in § 145.13 for applying for a new certificate, but without copies of the brochure.

§ 145.17 Duration of certificates.

(a) A domestic repair station certificate or rating is effective until it is surrendered, suspended, or revoked.

(b) A foreign repair station certificate or rating expires at the end of one year after the date on which it was issued, or renewed, unless it is sooner surrendered, suspended, or revoked. However, if the station continues to comply with § 145.71 and applies, its certificate may be renewed for another year.

(c) The holder of a certificate that expires or is surrendered, suspended, or revoked, shall return it to the Administrator.

§ 145.19 Display of certificate.

Each holder of a repair station certificate shall display the certificate and ratings at a place in the repair station that is normally accessible to the public and is not obscured. The certificate must be available for inspection by the Administrator.

§ 145.21 Change of location or facilities.

(a) The holder of a repair station certificate may not make any change in its location or in its housing and facilities that are required by § 145.35, unless the change is approved in writing in advance.

(b) The Administrator may prescribe the conditions under which a repair station may operate while it is changing its location or housing facilities.

§ 145.23 Inspection.

Each certificated repair station shall allow the Administrator to inspect it, at any time, to determine its compliance with this part. After the original inspection, formal inspections are normally made once a year and cover the adequacy of the station's inspection system, personnel, stock facilities, equipment, records, and its general ability to comply with this part. After such an inspection is made, the repair station is notified, in writing, of any defects found during the inspection. Other informal inspections may be made from time to time.

§ 145.25 Advertising.

(a) Whenever the advertising of a certificated repair station indicates that it is certificated, it must clearly state its certificate number.

(b) Paragraph (a) of this section applies to advertising in—

- (1) Business letterheads;
- (2) Billheads and statements;
- (3) Customer estimates and inspection forms;
- (4) Hangar or shop signs;
- (5) Magazines, periodicals, or trade journals; or
- (6) Any form of promotional media.

Subpart B—Domestic Repair Stations

§ 145.31 Ratings.

The following ratings are issued under this subpart:

(a) Airframe ratings:

(1) Class 1: Composite construction of small aircraft.

(2) Class 2: Composite construction of large aircraft.

(3) Class 3: All-metal construction of small aircraft.

(4) Class 4: All-metal construction of large aircraft.

(b) Powerplant ratings:

(1) Class 1: Reciprocating engines of 400 horsepower or less.

(2) Class 2: Reciprocating engines of more than 400 horsepower.

(3) Class 3: Turbine engines.

(c) Propeller ratings:

(1) Class 1: All fixed pitch and ground adjustable propellers of wood, metal, or composite construction.

(2) Class 2: All other propellers, by make.

(d) Radio ratings:

(1) Class 1: Communication equipment: Any radio transmitting equipment or receiving equipment, or both, used in aircraft to send or receive communications in flight, regardless of carrier frequency or type of modulation used; including auxiliary and related aircraft interphone systems, amplifier systems, electrical or electronic inter-crew signaling devices, and similar equipment; but not including equipment used for navigation of the aircraft or as an aid to navigation, equipment for measuring altitude or terrain clearance, other measuring equipment operated on radio or radar principles, or mechanical, electrical, gyroscopic, or electronic instruments that are a part of communications radio equipment.

(2) Class 2: Navigational equipment: Any radio system used in aircraft for en route or approach navigation, except equipment operated on radar or pulsed radio frequency principles, but not including equipment for measuring altitude or terrain clearance or other distance equipment operated on radar or pulsed radio frequency principles.

(3) Class 3: Radar equipment: Any aircraft electronic system operated on radar or pulsed radio frequency principles.

(e) Instrument ratings:

(1) Class 1: Mechanical: Any diaphragm, bourdon tube, aneroid, optical, or mechanically driven centrifugal instrument that is used on aircraft or to operate aircraft, including tachometers, airspeed indicators, pressure gauges, drift sights, magnetic compasses, altimeters, or similar mechanical instruments.

(2) Class 2: Electrical: Any self-synchronous and electrical indicating instruments and systems, including remote indicating instruments, cylinder head temperature gauges, or similar electrical instruments.

(3) Class 3: Gyroscopic: Any instrument or system using gyroscopic principles and motivated by air pressure or electrical energy, including automatic pilot control units, turn and bank indicators, directional gyros, and their parts, and flux gate and gyrosyn compasses.

(4) Class 4: Electronic: Any instruments whose operation depends on electron tubes, transistors, or similar devices, including capacitance type quantity gauges, system amplifiers, and engine analyzers.

(f) Accessory ratings:

(1) Class 1: Mechanical accessories that depend on friction, hydraulics, mechanical linkage, or pneumatic pressure for operation, including aircraft wheel brakes, mechanically driven pumps, carburetors, aircraft wheel assemblies, shock absorber struts and hydraulic servo units.

(2) Class 2: Electrical accessories that depend on electrical energy for their operation, and generators, including starters, voltage regulators, electric motors, electrically driven fuel pumps, magnetos, or similar electrical accessories.

(3) Class 3: electronic accessories that depend on the use of an electron tube, transistor, or similar device, including supercharger, temperature, air conditioning controls, or similar electronic controls.

§ 145.33 Limited ratings.

(a) Whenever the Administrator finds it appropriate, he may issue a limited rating to a domestic repair station that maintains or alters only a particular type of airframe, powerplant, propeller, radio, instrument, or accessory, or parts thereof, or performs only specialized maintenance requiring equipment and skills not ordinarily found in regular repair stations. Such a rating may be limited to a specific model aircraft, engine, or constituent part, or to any number of parts made by a particular manufacturer.

(b) Limited ratings are issued for—

- (1) Airframes of a particular make and model;
- (2) Engines of a particular make and model;
- (3) Propellers of a particular make and model;
- (4) Instruments of a particular make and model;
- (5) Radio equipment of a particular make and model;
- (6) Accessories of a particular make and model;
- (7) Landing gear components;
- (8) Floats, by make;
- (9) Nondestructive inspection, testing, and processing;
- (10) Emergency equipment;
- (11) Rotor blades, by make and model;
- (12) Aircraft fabric work; and
- (13) Any other purpose for which the Administrator finds the applicant's request is appropriate.

(c) For a limited rating for specialized services, the operations specifications of the station shall contain the specification used in performing that specialized service. The specification may either be a civil or military one that is currently used by industry and approved by the Administrator or one developed by the applicant and approved by the Administrator.

§ 145.35 Housing and facility requirements.

(a) An applicant for a domestic repair station certificate and rating, or for an additional rating, must comply with paragraphs (b) to (h) of this section and provide suitable—

(1) Housing for its necessary equipment and material;

(2) Space for the work for which it seeks a rating;

(3) Facilities for properly storing, segregating, and protecting materials, parts, and supplies; and

(4) Facilities for properly protecting parts and subassemblies during disassembly, cleaning, inspection, repair, alteration, and assembly;

so that work being done is protected from weather elements, dust, and heat; workers are protected so that the work will not be impaired by their physical efficiency; and maintenance operations have efficient and proper facilities.

(b) The applicant must provide suitable shop space where machine tools and equipment are kept and where the largest amount of bench work is done. The shop space need not be partitioned but machines and equipment must be segregated whenever—

(1) Machine or woodwork is done so near an assembly area that chips or material might inadvertently fall into assembled or partially assembled work;

(2) Unpartitioned parts cleaning units are near other operations;

(3) Fabric work is done in an area where there are oils and greases;

(4) Painting or spraying is done in an area so arranged that paint or paint dust can fall on assembled or partially assembled work;

(5) Paint spraying, cleaning, or machining operations are done so near testing operations that the precision of test equipment might be affected; and

(6) In any other case the Administrator determines it is necessary.

(c) The applicant must provide suitable assembly space in an enclosed structure where the largest amount of assembly work is done. The assembly space must be large enough for the largest item to be worked on under the rating he seeks and must meet the requirements of paragraph (a) of this section.

(d) The applicant must provide suitable storage facilities used exclusively for storing standard parts, spare parts, and raw materials, and separated from shop and working space. He must organize the storage facilities so that only acceptable parts and supplies will be issued for any job, and must follow standard good practices for properly protecting stored materials.

(e) The applicant must store and protect parts being assembled or disassembled, or awaiting assembly or disassembly, to eliminate the possibility of damage to them.

(f) The applicant must provide suitable ventilation for his shop, assembly, and storage areas so that the physical efficiency of his workers is not impaired.

(g) The applicant must provide adequate lighting for all work being done so that the quality of the work is not impaired.

(h) The applicant must control the temperature of the shop and assembly area so that the quality of the work is not impaired. Whenever special maintenance operations are being performed, such as fabric work or painting, the temperature and humidity control must

be adequate to insure the airworthiness of the article being maintained.

§ 145.37 Special housing and facility requirements.

(a) In addition to the housing and facility requirements in § 145.35, an applicant for a domestic repair station certificate and rating, or for an additional rating, for airframes, powerplants, propellers, instruments, accessories, or radios must meet the requirements of paragraphs (b) to (f) of this section.

(b) An applicant for an airframe rating must provide suitable permanent housing for at least one of the heaviest aircraft within the weight class of the rating he seeks. If the location of the station is such that climatic conditions allow work to be done outside, permanent work docks may be used if they meet the requirements of § 145.35(a).

(c) An applicant for either a powerplant or accessory rating must provide suitable trays, racks, or stands for segregating complete engine or accessory assemblies from each other during assembly and disassembly. He must provide covers to protect parts awaiting assembly or during assembly to prevent dust or other foreign objects from entering into or falling on those parts.

(d) An applicant for a propeller rating must provide suitable stands, racks, or other fixtures for the proper storage of propellers after being worked on.

(e) An applicant for a radio rating must provide suitable storage facilities to assure the protection of parts and units that might deteriorate from dampness or moisture.

(f) An applicant for an instrument rating must provide a reasonably dust free shop if the shop allocated to final assembly is not air conditioned. Shop and assembly areas must be kept clean at all times to reduce the possibility of dust or other foreign objects getting into instrument assemblies.

§ 145.39 Personnel requirements.

(a) An applicant for a domestic repair station certificate and rating, or for an additional rating, must provide adequate personnel who can perform, supervise, and inspect the work for which the station is to be rated. The officials of the station must carefully consider the qualifications and abilities of their employees and shall determine the abilities of its uncertificated employees performing maintenance operations on the basis of practical tests or employment records. The repair station is primarily responsible for the satisfactory work of its employees.

(b) The number of repair station employees may vary according to the type and volume of its work. However, the applicant must have enough properly qualified employees to keep up with the volume of work in process, and may not reduce the number of its employees below that necessary to efficiently produce airworthy work.

(c) Each repair station shall determine the abilities of its supervisors and shall provide enough of them for all phases of its activities. However, the Administrator may determine the ability of any supervisor by inspecting his em-

ployment and experience records or by a personal test. Each supervisor must have direct supervision over working groups but need not have over-all supervision at management level. Whenever apprentices or students are used in working groups on assemblies or other operations that might be critical to the aircraft, the repair station shall provide at least one supervisor for each 10 apprentices or students, unless the apprentices or students are integrated into groups of experienced workers.

(d) Each person who is directly in charge of the maintenance functions of a repair station must be appropriately certificated as a mechanic or repairman under Part 65 of this chapter and must have had at least 18 months of practical experience in the procedures, practices, inspection methods, materials, tools, machine tools, and equipment generally used in the work for which the station is rated. Experience as an apprentice or student mechanic may not be counted in computing the 18 months of experience. In addition, at least one of the persons so in charge of maintenance functions for a station with an airframe rating must have had experience in the methods and procedures prescribed by the Administrator for returning aircraft to service after 100-hour, periodic, and progressive inspections.

(e) Each limited repair station shall have employees with detailed knowledge of the particular maintenance function or technique for which it is rated, based on attending a factory school or long experience with the product or technique involved.

§ 145.41 Recommendation of certification for repairmen.

An applicant for a domestic repair station certificate and rating, or for an additional rating, that requires a repairman must, at the time of application, recommend and certify to the Administrator at least one person as a repairman, by stating that he is able to perform and supervise the work to which he is assigned. Each person so certified must be at or above the level of shop foreman or department head. A qualified person so recommended by the station is entitled to be certificated as a repairman.

§ 145.43 Records of supervisory and inspection personnel.

(a) Each applicant for a domestic repair station certificate and rating, or for an additional rating, must have, and each certificated domestic repair station shall maintain, a roster of—

(1) Its supervisory personnel, including the names of the officials of the station that are responsible for its management and the names of its technical supervisors, such as foreman and crew chiefs; and

(2) Its inspection personnel, including the names of the chief inspector and those inspectors who make final airworthiness determinations before releasing an article to service.

(b) The station shall also provide a summary of the employment of each person whose name is on the roster. The summary must contain enough informa-

tion as to each person on the roster to show compliance with the experience requirements of this subpart, including—

(1) His present title (e.g., chief inspector, metal shop foreman, etc.);

(2) His total years of experience in the type of work he is doing;

(3) His past employment record, with names of places and term of employment by month, date, and year;

(4) The scope of his present employment (e.g., airframe overhaul, airframe final assembly, engine inspection, department, etc.); and

(5) The type and number of the mechanic or repairman certificate that he holds, and the ratings on that certificate.

(c) The station shall change the roster, as necessary, to reflect—

(1) Terminating the employment of any person whose name is on the roster;

(2) Assigning any person to duties that require his name to be carried on the roster; or

(3) Any appreciable change in the duties and scope of assignment of any person whose name is on the roster.

(d) The station shall send the roster and employment summaries required by this section, and any changes therein, to the Administrator for evaluation and thereafter shall keep them, subject to inspection by the Administrator upon his request.

(e) A domestic repair station may not use the services of a person directly in charge of maintenance or alteration unless it keeps current records on him as required by this section.

§ 145.45 Inspection systems.

(a) An applicant for a repair station certificate and rating, or for an additional rating, must have an inspection system that will produce satisfactory quality control and conform to paragraphs (b) to (f) of this section.

(b) The applicant's inspection personnel must be thoroughly familiar with all inspection methods, techniques, and equipment used in their specialty to determine the quality or airworthiness of an article being maintained or altered. In addition, they must—

(1) Maintain proficiency in using various inspection aids intended for that purpose;

(2) Have available and understand current specifications involving inspection tolerances, limitations, and procedures established by the manufacturer of the product being inspected and with other forms of inspection information such as FAA airworthiness directives and bulletins; and

(3) In cases where magnetic, fluorescent, or other forms of mechanical inspection devices are to be used, be skilled in operating that equipment and be able to properly interpret defects indicated by it.

(c) The applicant must provide a satisfactory method of inspecting incoming material to insure that, before it is placed in stock for use in an aircraft or part thereof, it is in a good state of preservation and is free from apparent defects or malfunctions.

(d) The applicant must provide a system of preliminary inspection of all articles he maintains to determine the

state of preservation or defects. He shall enter the results of each inspection on an appropriate form supplied by it and keep the form with the article until it is released to service.

(e) The applicant must provide a system so that before working on any airframe, powerplant, or part thereof that has been involved in an accident, it will be inspected thoroughly for hidden damage, including the areas next to the obviously damaged parts. He shall enter the results of this inspection on the inspection form required by paragraph (d) of this section.

(f) At the time he applies for a repair station certificate, the applicant must prepare an inspection procedures manual to be maintained in current condition at all times thereafter. The manual must explain the internal inspection system of the repair station in a manner easily understood by any employee of the station. It must state in detail the inspection requirements in paragraphs (a) to (e) of this section, and the repair station's inspection system including the continuity of inspection responsibility, samples of inspection forms, and the method of executing them. The manual must refer whenever necessary to the manufacturer's inspection standards for the maintenance of the particular article. The repair station must give a copy of the manual to each of its supervisory and inspection personnel and make it available to its other personnel. The repair station is responsible for seeing that all supervisory and inspection personnel thoroughly understand the manual.

§ 145.47 Equipment and materials: Ratings other than limited ratings.

(a) An applicant for a domestic repair station certificate and rating, or for an additional rating, must have the equipment and materials necessary to efficiently perform the functions appropriate to the ratings he seeks. An applicant for an airframe, propeller, powerplant, radio, instrument, or accessory rating must be equipped to perform the functions listed in Appendix A to this part that are appropriate for the rating he seeks.

(b) The equipment and materials required by this part must be of such type that the work for which they are being used can be done competently and efficiently. The station shall test all inspection and test equipment at regular intervals to insure correct calibration. The equipment and materials required for the various ratings must be located on the premises, and under the full control of the station, unless they are used for a function that the repair station is authorized to obtain by contract. If it obtains them by contract, the repair station shall determine the airworthiness of the article involved, unless the contractor is an appropriately rated repair station.

(c) The applicant shall choose suitable tools and equipment for the functions named in Appendix A to this part, as appropriate to each of his ratings, using those the manufacturer of the article involved recommends for maintaining or altering that article, or their equivalent.

§ 145.49 Equipment and materials: Limited rating.

(a) An applicant for a limited rating (other than specialized services) under § 145.33, must have the equipment and materials to perform any job function appropriate to the rating and class specified in § 145.47 for the rating he seeks. However, he need not be equipped for a function that does not apply to the particular make or model article for which he seeks a rating, if he shows that it is not necessary under the recommendations of the manufacturer of the article.

(b) An applicant for a rating for specialized services or techniques under § 145.33 must—

(1) For magnetic and penetrant inspection, have the equipment and materials for wet and dry magnetic inspection techniques, residual and continuous methods, and portable equipment for the inspection of welds both on and off the aircraft;

(2) For emergency equipment maintenance, have the equipment and materials to perform inspections, repairs, and tests of all kinds of inflated equipment, the re-packing, re-marking, re-sealing, and restocking of life rafts, and the weighing, refilling, and testing of carbon dioxide fire extinguishers and oxygen containers;

(3) For rotor blade maintenance, have the equipment, materials, and technical data recommended by the manufacturer; and

(4) For aircraft fabric work, have the equipment and materials to apply protective coatings to structures, machine stitch fabric panels, perform covering, sewing, and rib stitching operations, apply dope and paint using temperature and humidity control equipment, install patches, grommets, tapes, hooks, and similar equipment, and refinish entire aircraft and aircraft parts.

§ 145.51 Privileges of certificates.

A certificated domestic repair station may—

(a) Maintain or alter any airframe, powerplant, propeller, instrument, radio, or accessory, or part thereof, for which it is rated;

(b) Approve for return to service any article for which it is rated after it has been maintained or altered;

(c) In the case of a station with an airframe rating, perform 100-hour, periodic, or progressive inspections, and return the aircraft to service; and

(d) Maintain or alter any article for which it is rated at a place other than the repair station, if—

(1) The function would be performed in the same manner as when performed at the repair station and in accordance with §§ 145.57 to 145.61;

(2) All necessary personnel, equipment, material, and technical data is available at the place where the work is to be done; and

(3) The inspection procedures manual of the station sets forth approved procedures governing work to be performed at a place other than the repair station.

However, a station may not approve any article for return to service under sub-

paragraph (b) or (d) of this paragraph after major repair or major alteration unless the repair or alteration was made in accordance with a manual or specification or other technical data approved by the Administrator.

§ 145.53 Limitations of certificates.

A certificated domestic repair station may not maintain or alter any airframe, powerplant, propeller, instrument, radio, or accessory for which it is not rated, and may not maintain or alter any article for which it is rated if it requires special technical data, equipment, or facilities that are not available to it.

§ 145.55 Maintenance of personnel, facilities, equipment, and materials.

Each certificated domestic repair station shall provide personnel, facilities, equipment, and materials at least equal in quality and quantity to the standards currently required for the issue of the certificate and rating that it holds.

§ 145.57 Performance standards.

(a) Each certificated domestic repair station shall perform its maintenance and alteration operations in accordance with the standards in Part ____ of this chapter [Present Part 18]. It shall maintain, in current condition, all manufacturers' service manuals, instructions, and service bulletins that relate to the articles that it maintains or alters.

(b) In addition, each certificated domestic repair station with a radio rating shall comply with those sections of Part ____ of this chapter [Present Part 18] that apply to electric systems, and shall use materials that conform to approved specifications for equipment appropriate to its rating. It shall use test apparatus, shop equipment, performance standards, test methods, alterations, and calibrations that conform to the manufacturers' specifications or instructions, approved specification, FAA accepted specifications of the Radio Technical Commission for Aeronautics, and, if not otherwise specified, to accepted good practices of the aircraft radio industry. The tolerances established by Part 9 of Title 47, Chapter I (47 CFR Part 9) apply to the making of radio transmitter frequency checks.

§ 145.59 Inspection of work performed.

(a) Each certificated domestic repair station shall, before approving an airframe, powerplant, propeller, instrument, radio, or accessory for return to service after maintaining or altering it, have that article inspected by a qualified inspector. After performing a maintenance or alteration operation, the station shall certify on the maintenance or alteration record of the article that it is airworthy.

(b) For the purposes of paragraph (a) of this section, the qualified inspector must be a person employed by the station, who has shown by experience as a journeyman that he understands the inspection methods, techniques, and equipment used in determining the airworthiness of the article concerned. He must also be proficient in using various types of mechanical and visual inspection

aids appropriate for the article being inspected.

§ 145.61 Performance records and reports.

Each certificated domestic repair station shall maintain adequate records of all work that it does, naming the certificated mechanic or repairman who performed or supervised the work, and the inspector of that work. The station shall keep each record for at least two years after the work it applies to is done.

§ 145.63 Reports of defects or unairworthy conditions.

(a) Each certificated domestic repair station shall report to the Administrator within 72 hours after it discovers any serious defect in, or other recurring unairworthy condition of, an aircraft, powerplant, or propeller, or any component of any of them. The report shall be made on a form and in a manner prescribed by the Administrator, describing the defect or malfunction completely without withholding any pertinent information.

(b) In any case where the filing of a report under paragraph (a) of this section might prejudice the repair station, it shall refer the matter to the Administrator for a determination as to whether it must be reported. If the defect or malfunction could result in an imminent hazard to flight, the repair station shall use the most expeditious method it can to inform the Administrator.

Subpart C—Foreign Repair Stations

§ 145.71 General requirements.

A repair station certificate with appropriate ratings may be issued for a foreign repair station, if the Administrator finds that the station is necessary for maintaining or altering United States registered aircraft outside of the United States. A foreign repair station must meet the requirements for a domestic repair station certificate, except those in §§ 145.39 to 145.43.

§ 145.73 Scope of work authorized.

(a) A certificated foreign repair station may, with respect to United States registered aircraft, work only on aircraft that are used in operations conducted wholly or partly outside of the United States. The Administrator may prescribe operating specifications and limitations that he determines are necessary to comply with the airworthiness requirements of this chapter.

(b) A certificated foreign repair station may perform only the specific services and functions within the ratings and classes that are stated in its operating limitations.

§ 145.75 Personnel.

(a) Each applicant for a foreign repair station certificate and rating, or for an additional rating, must provide enough personnel who are able to perform, supervise, and inspect the work for which he seeks a rating, with regard being given to its volume of work.

(b) The supervisors and inspectors of each certificated foreign repair station

must understand the regulations in this chapter, FAA airworthiness directives, and the maintenance and service instructions of the manufacturers of the articles to be worked on. However, they do not need airman certificates issued under this chapter and, along with the persons performing the work of the station, are not considered to be airmen within the meaning of section 101(7) of the Federal Aviation Act of 1958 (49 U.S.C. 1301) with respect to work performed in connection with their employment by the foreign repair station.

(c) In cases where the persons engaged in supervision or final inspection are not certificated under this chapter or by the country in which the station is located, their qualifications are determined by the Administrator, based on their ability to meet the requirements of paragraph (a) of this section as shown by oral or practical test or any other method the Administrator elects.

(d) No person may be responsible for the supervision or final inspection of work on an aircraft of United States registry at a foreign repair station unless he can read, write, and understand English.

§ 145.77 General operating rules.

Each certificated foreign repair station shall comply with the operating rules prescribed in Subpart B of this part, except for §§ 145.61 and 145.63, and has the privileges of a domestic repair station as provided in § 145.51.

§ 145.79 Records and reports.

(a) Each certificated foreign repair station shall maintain such records, and make such reports, with respect to United States registered aircraft, as the Administrator finds necessary, including those prescribed in paragraphs (b) and (c) of this section.

(b) Each certificated foreign repair station shall keep a record of the maintenance and alteration it performs on United States registered aircraft, in enough detail to show the make, model, identification number, and serial number of the aircraft involved, and a description of the work. In a case of major repairs or major alterations, or both, it shall report on a form and in a manner prescribed by the Administrator, giving the original copy to the aircraft owner and sending a copy to the Administrator through the FAA office having jurisdiction over the station. However, if a major repair or alteration is made on a United States scheduled flag air carrier aircraft, the report may be made in the log or other record provided by the carrier for that purpose. Upon request, the station shall make all of its maintenance and alteration records available to the Administrator.

(c) Each certificated foreign repair station shall, within 72 hours after it discovers any serious defect in, or other recurring unairworthy condition of, any aircraft, powerplant, propeller, or any component of any of them, that it works on under this part, report that defect or unairworthy condition to the Administrator.

PART 145—DISTRIBUTION TABLE

| Former section | Revised section | Former section | Revised section |
|-----------------|------------------|----------------|------------------|
| 52.0 | 145.1 | 52.24 | 145.43 |
| 52.1 | (¹) | 52.24-1 | 145.43 |
| 52.5 | 145.11 | 52.25 | 145.45 |
| 52.5-1 (less | | 52.25-1 | 145.45 |
| (c)-(f)) | 145.11 | 52.26 | 145.31 |
| 52.5-1(c) | 145.15 | 52.26-1 | 145.31 |
| 52.5-1(d) and | | 52.27 | 145.33 |
| (e) | 145.13 | 52.27-1 | 145.33 |
| 52.5-1(f) (1st | | 52.30 | 145.47 |
| sentence) | 145.17 | 52.30-1 | 145.47 |
| 52.5-1(f) (last | | 52.31 | 145.47 |
| sentence) | 145.3 | 52.31-1 | (²) |
| 52.5-1(f) (less | | 52.32 | 145.47 |
| 1st and last | | 52.32-1 | (²) |
| sentences) | 145.15 | 52.33 | 145.47 |
| 52.6 (less last | | 52.33-1 | (²) |
| sentence) | 145.11 | 52.34 | 145.47 |
| 52.6 (last | | 52.34-1 | (²) |
| sentence) | 145.3 | 52.35 | 145.47 |
| 52.6-1 | 145.3 | 52.35-1 | (²) |
| 52.7 | 145.17 | 52.36 | 145.47 |
| 52.7-1 | 145.17 | 52.36-1 | (²) |
| 52.8 | (²) | 52.37 | 145.49 |
| 52.9 | 145.19 | 52.37-1 | 145.49 |
| 52.9-1 | 145.19 | 52.40 | 145.51 |
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| 52.10-1 | 145.21 | 52.41-1 | 145.51 |
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| 52.20-1 | 145.11 | 52.50-1 | 145.71 |
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| 52.21-1 | 145.35 | 52.51-1 | 145.73 |
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| 52.22 | 145.39 | 52.60 | 145.77 |
| 52.22-1 | 145.39 | 52.61 | 145.79 |
| 52.23 | 145.41 | 52.61-1 | 145.79 |
| 52.23-1 | 145.41 | | |

¹ Transferred to Part 1.² Executed.³ Appendix A.

APPENDIX A

NOTE: An asterisk (*) indicates that the applicant need not have equipment and materials on his premises for this function provided he contracts that particular type work to an outside agency having such equipment and materials.

(a) An applicant for any class of airframe rating must provide equipment and materials necessary for efficiently performing the following job functions within the class of rating he applied for:

(1) *Classes 1 and 2—composite construction of aircraft*—(i) Steel structural components. Repair or replace steel tubes and fittings, using proper welding techniques when appropriate.

Anticorrosion treatment of the interior and exterior of steel parts.

Metal plating or anodizing.*

Simple machine operations such as making bushings, bolts, etc.,

Complex machine operations involving the use of planers, shapers, milling machines, etc.,*

Fabricate steel fittings,

Abrasive air blasting and chemical cleaning operations,*

Heat treatment,*

Magnetic inspection,*

Repair or rebuild metal tanks.*

(ii) *Wood structure*. Splice wood spars,

Repair ribs and spars (wood),

Fabricate wood spars,*

Repair or replace metal ribs,

Interior alignment of wings,

Repair or replace plywood skin,

Treatment against wood decay.

(iii) *Alloy skin and structural components*. Repair and replace metal skin, using power tools and equipment,

Repair, replace, and fabricate alloy members and components such as tubes, channels, cowlings, fittings, attach angles, etc.,

Alignment of components, using jigs or fixtures as in the case of joining fuselage sections or other similar operations,

Make up wooden forming blocks or dies,

Fluorescent inspection of alloy components.*

(iv) *Fabric covering*. Repairs to fabric surfaces,

Recovering and refinishing of components and entire aircraft.*

(v) *Control systems*. Renewing control cables, using swaging and splicing techniques,

Rigging complete control system,

Renewing or repairing all control system hinge point components such as pins, bushings, etc.,

Install control system units and components.

(vi) *Landing gear systems*. Renew or repair all landing gear hinge point components and attachments such as bolts, bushings, fittings, etc.,

Overhaul and repair elastic shock absorber units,

Overhaul and repair hydraulic-pneumatic shock absorber units,*

Overhaul and repair brake system components,*

Conduct retraction cycle tests,

Overhaul and repair electrical circuits,

Overhaul and repair hydraulic system components.*

Repair or fabricate hydraulic lines.

(vii) *Electric wiring systems*. Diagnose malfunctions,

Repair or replace wiring,

Installation of electrical equipment,

Bench check electrical components (this check is not to be confused with the more complex functional test after overhaul).

(viii) *Assembly operations*. Assembly of airframe component parts such as landing gear, wings, controls, etc.,

Rigging and alignment of airframe components, including the complete aircraft and control system,

Installation of powerplants,

Installation of instruments and accessories,

Assembly and fitting of cowlings, fairings, etc.,

Repair and assembly of plastic components such as windshields, windows, etc.,

Jack or hoist complete aircraft,

Conduct aircraft weight and balance operations (this function will be conducted in draft free area)*.

Balance control surfaces.

(b) An applicant for any class of powerplant rating must provide equipment and materials necessary for efficiently performing the following job functions within the class of rating he applied for:

(1) *Class 1; Engines up to and including 400 horsepower*. (i) Maintain, repair, and alter powerplants, including replacement of parts:

Chemical and mechanical cleaning,

Disassembly operations,

Replacement of valve guides and seats,

Replacement of bushings, bearings, pins, inserts, etc.,

Plating operations (copper, silver, cadmium, etc.),*

Heating operations (involving the use of recommended techniques requiring controlled heating facilities),

Chilling or shrinking operations,

Removal and replacement of studs,

Inscribing or affixing identification information,

Painting of powerplants and components,

Anticorrosion treatment for parts,

Replacement and repair of powerplant alloy sheet metal and steel components such as baffles, fittings, etc.*

(ii) Inspect all parts, using appropriate inspection aids:

Magnetic, fluorescent and other acceptable inspection aids,*

Precise determination of clearances and tolerances of all parts,

Inspection for alignment of connecting rods, crankshafts, impeller shafts, etc.,*

Inspection of valve springs.

(iii) Accomplish routine machine work:

Precision grinding, honing and lapping operations (includes crankshaft, cylinder barrels, etc.),*

Precision drilling, tapping, boring, milling and cutting operations,

Reaming of inserts, bushings, bearings and other similar components,

Refacing of valves.

(iv) Perform assembly operations:

Valve and ignition timing operations,

Fabricate and test ignition harnesses,

Fabricate and test rigid and flexible fluid lines,

Prepare engines for long- or short-term storage.

Functional check powerplant accessories

(this check is not to be confused with the more complex performance test of overhaul)*.

Hoist engines by mechanical means,

Install engines in aircraft,*

Align and adjust engine controls.*

(v) Test overhauled powerplants in compliance with manufacturer's recommendations:

The test equipment will be the same as recommended by the manufacturers of the particular engines undergoing test or equivalent equipment that will accomplish the same purpose. The testing function may be performed by the repair station itself, or may be contracted to an outside agency. In either case the repair station will be responsible for the final acceptance of the tested engine.

(2) *Class 2; engines above 400 horsepower*. (Same as class 1.)

(3) *Class 3; turbine engines*. Functional and equipment requirements for turbine engines will be governed entirely by the recommendations of the manufacturer, including techniques, inspection methods, and test.

(c) An applicant for all classes of propeller ratings must provide equipment and materials necessary for efficiently performing the following job functions within the class of rating he applied for:

(1) *Class 1; fixed-pitch propellers*. (i) Maintain, repair, and alter propellers, including installation and the replacement of parts:

Replace blade tipping,

Refinish wood propellers,

Make wood inlays,

Refinish plastic blades,

Straighten bent blades within repairable tolerances,

Modify blade diameter and profile,

Polish and buff,

Painting operations,

Remove from and reinstall on powerplants.

(ii) Inspect components, using appropriate inspection aids:

Inspect propellers for conformity with manufacturer's drawings and specifications,

Inspect hubs and blades for failures and defects, using magnetic or fluorescent inspection devices,*

Inspect hubs and blades for failures and defects, using all visual aids, including the etching parts,

Inspect hubs for wear of splines or keyways or any other defect.

(iii) Repair or replace components: (Not applicable to this class.)

(iv) Balance propellers:

Test for proper track on aircraft,

Test for horizontal and vertical unbalance (this test will be accomplished with the use of precision equipment).

(v) Test propeller pitch changing mechanism: (Not applicable to this class.)

(2) *Class 2; all other types by make.* (i) Maintain, repair, and alter propellers, including installation and the replacement of parts: All functions listed under Class 1 of paragraph (c) (1) (i) of this Appendix when applicable to the make and model for which rated.

Properly lubricate moving parts. Assemble complete propeller and sub-assemblies, using special tools when required. (ii) Inspect components, using appropriate inspection aids:

All functions listed under Class 1 of paragraph (c) (2) (ii) of this Appendix when applicable to the make and model for which rated.

(iii) Repair or replace component parts: Replace blades, hubs, or any of their components.

Replace or repair anti-icing devices, Remove nicks or scratches from blades, Repair or replace electrical propeller components.

(iv) Balance propellers: All functions listed under Class 1 of paragraph (c) (1) (iv) of this Appendix, when applicable to the make and model for which rated.

(v) Test propeller pitch changing mechanism:

Test hydraulically, propellers, and components.

Test electrically operated propellers and components.

Test of constant speed devices.*

(d) An applicant for all classes of radio ratings must provide equipment and materials necessary for efficiently performing the following job functions within the class of rating he applied for:

(1) *Class 1; communications equipment.*

(i) Diagnose radio malfunctions:

Check aircraft wiring, antennas, connectors, relays and other associated radio components to detect installation faults.

Check engine ignition systems and aircraft accessories to determine sources of electrical interference.

Check aircraft power supplies for adequacy and proper functioning.

(ii) Maintain, repair, and alter, radios, including installation and the replacement of parts:

Overhaul, test and check dynamotors, inverters, and other radio rotary electrical apparatus.*

Paint and refinish equipment containers.*

Accomplish appropriate methods of marking calibrations, or other information on radio control panels and other components, as required.*

Make and reproduce drawings, wiring diagrams and other similar material required to record alterations and/or modifications to radios (photographs may be used in lieu of drawings when it will serve as an equivalent or better means of recording).*

Fabricate tuning shaft assemblies, brackets, cable assemblies, and other similar components used in radios or aircraft radio installations.*

Align tuned circuits (RF and IF).

Test and repair head sets, speakers, and microphones.

Install and repair aircraft antennas.

Install complete radio systems in aircraft and prepare weight and balance reports* (that phase of radio installation requiring alterations to the aircraft structure must be performed, supervised and inspected by qualified personnel).

Measure modulation values, noise and distortion in radios.

Measure audio and radio frequencies.

Measure radio transmitter power output.

Measure radio component values (inductance, capacitance, resistance, etc.).

Measure aircraft radio antenna, lead-in and transmission line direct current resistance by appropriate methods.

Determine proper aircraft radio antenna, lead-in and transmission line characteristics and locations for type or radio equipment to which connected.

Determine operational condition of radio equipment installed in aircraft by using appropriate portable test apparatus.

Determine proper location for radio antennas on aircraft.

(iii) Inspect and test radios:

Perform physical inspection of radio systems and components by visual and mechanical methods.

Perform electrical inspection of radio systems and components by means of appropriate electrical and/or electronic test instruments.

Test radio instruments.*

Test all types of electronic tubes used in equipment appropriate to this rating.

Test electrical components of radios, such as resistors, condensers, transformers, chokes and other related items.

(iv) Make frequency checks: Measure radio frequencies to appropriate tolerances and calibrate equipment to such tolerances when applicable.

(v) Perform such calibrations as are necessary for the proper operation of radios: This applies to all functions listed under subparagraphs (i) through (iv) of this paragraph.

(2) *Class 2; navigational equipment.*

(i) Diagnose radio malfunctions: Provide equipment and material which are satisfactory to perform all functions listed under Class 1 of paragraph (d) (1) (i) of this Appendix.

(ii) Maintain, repair, and alter radios, including installation and the replacement of parts:

Measure loop antenna sensitivity by appropriate methods.

Determine and compensate quadrantal error in aircraft direction finder radio equipment.

Measure radio frequency transmission line attenuation.

(iii) Inspect and test radios: Provide equipment and material which are satisfactory to perform all functions listed under Class 1 of paragraph (d) (1) (iii) of this Appendix.

(iv) Make frequency checks: Provide equipment and material which are satisfactory to perform all functions listed under Class 1 of paragraph (d) (1) (iv) of this Appendix.

(v) Perform such calibrations as are necessary for the proper operation of radios: Calibrate instrument landing system equipment to approved performance standards.

Calibrate VHF navigational systems to approved performance standards.

Calibrate VHF marker beacon receiver systems to approved performance standards.

Calibrate any navigational equipment, approach aids or similar equipment, appropriate to this rating, to approved performance standards.

Determine wave forms and phase in radios when applicable.

(3) *Class 3; radar equipment.* (i) Diagnose radio (radar) malfunctions: Provide equipment and material which are satisfactory to perform all functions listed under Class 1 of paragraph (d) (1) (i) of this Appendix.

(ii) Maintain, repair, and alter radios (radar), including installation and the replacement of parts:

Provide equipment and material which are satisfactory to perform all functions listed under Class 1 of paragraphs (d) (1) (ii) and (2) (ii) of this section.

Metal plate transmission lines, wave guides, and similar equipment, in accordance with appropriate specifications.

Pressurize appropriate radar equipment with dry air, nitrogen or other specified gases.

(iii) Inspect and test radios: Provide equipment and material which are satisfactory to perform all functions listed under Class 1 of paragraph (d) (1) (iii) of this Appendix.

(iv) Make frequency checks: Provide equipment and material which are satisfactory to perform all functions listed under Class 1 of paragraph (d) (1) (iv) of this Appendix.

(v) Perform such calibrations as are necessary for the proper operation of radios: Provide equipment and material which are satisfactory to perform all functions listed under Class 1 of paragraph (d) (1) (v) of this Appendix.

(e) An applicant for any class of instrument rating must provide equipment and materials necessary for efficiently performing the following job functions within the class of rating he applied for:

(1) *Class 1; mechanical instruments.* (i) Diagnose instrument malfunctions: Equipment must be satisfactory to diagnose malfunction of the following instruments:

Rate of climb indicators, Altimeters, Airspeed indicators, Vacuum indicators, Oil pressure gauges, Fuel pressure gauges, Hydraulic pressure gauges, De-icing pressure gauges, Pitot-static tube, Direct indicating compasses, Direct indicating tachometers, Accelerometer, Direct reading fuel quantity gauges, Optical (sextants, drift sights, etc.).*

(ii) Maintain, repair, and alter instruments, including installation and the replacement of parts: Equipment and materials must be satisfactory to perform these functions on instruments listed under Class 1 of subparagraph (i) of this paragraph. The function of installation includes fabrication of instrument panels and other installation structural components. The repair station should be equipped to perform this function. However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) Inspect, test, and calibrate instruments. Equipment and materials must be satisfactory to perform these functions on and off the aircraft, when appropriate, on all instruments under Class 1 of subparagraph (i) of this paragraph.

(2) *Class 2; electrical instruments.* (i) Diagnose instrument malfunctions: Equipment must be satisfactory to diagnose malfunctioning of the following instruments:

Tachometers, Synchroscope, Electric temperature indicators, Electric resistance type indicators, Moving magnet type indicators, Resistance type fuel indicators, Warning units (oil-fuel), Selsyn systems and indicators, Synchro style systems and indicators, Remote indicating compasses, Fuel quantity indicators, Oil quantity indicators, Radio indicators, Ammeters, Voltmeters.

(ii) Maintain, repair, and alter instruments, including installation and replacement of parts: Equipment and materials must be satisfactory to perform these functions on instruments listed under Class 2 of paragraph (e) (2) (i) of this Appendix. The function of installation includes fabrication of instrument panels and other installation structural components. The repair station should be equipped to perform this function. However, it may be contracted

to a competent outside agency equipped to perform the function.

(iii) Inspect, test, and calibrate instruments: Equipment and materials must be satisfactory to perform these functions on and off the aircraft, when appropriate, on all instruments under Class 2 of paragraph (e)(2)(i) of this Appendix.

(3) Class 3; gyroscopic instruments. (i) Diagnose instrument malfunctions: Equipment must be satisfactory to diagnose malfunctioning of the following instruments:

Turn and bank indicators,
Directional gyros,
Horizontal gyros,
Autopilot control units and components.

(ii) Maintain, repair, and alter instruments, including installation and replacement of parts: Equipment and materials must be satisfactory to perform these functions on instruments listed under Class 3 of subparagraph (i) of this paragraph. The function of installation includes fabrication of instrument panels and other installation structural components. The repair station should be equipped to perform this function. However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) Inspect, test, and calibrate instruments: Equipment and materials must be satisfactory to perform these functions on and off the aircraft, when appropriate, on all instruments under Class 3 of subparagraph (i) of this paragraph.

(4) Class 4; electronic instruments. (i) Diagnose instrument malfunctions: Equipment must be satisfactory to diagnose malfunctioning of the following instruments:

Remote reading direction indicators,
Distance measuring equipment,
Other electronic instruments.

(ii) Maintain, repair, and alter instruments, including installation and replacement of parts: Equipment and materials must be satisfactory to perform these functions on instruments listed under Class 4 of subparagraph (i) of this paragraph. The function of installation includes fabrication of instrument panels and other installation structural components. However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) Inspect, test, and calibrate instruments: Equipment and materials must be satisfactory to perform these functions on and off the aircraft, when appropriate, on all instruments listed under Class 4 of subparagraph (i) of this paragraph.

(f) An applicant for all classes of accessory ratings must provide equipment and materials necessary for efficiently performing the following job functions within the class of rating he applied for:

Class 1, 2, and 3; mechanical, electrical, or electronic accessories. (1) Diagnose accessory malfunctions;

(2) Maintain, repair, and alter accessories, including installation and the replacement of parts;

(3) Inspect, test, and, where necessary, calibrate accessories.

PART 147—MECHANIC SCHOOLS [NEW]

Subpart A—General

- Sec.
147.1 Applicability.
147.3 Certificate required.
147.5 Application and issue.
147.7 Duration of certificates.

Subpart B—Certification Requirements

- 147.11 Ratings.
147.13 Facilities, equipment, and material requirements.
147.15 Space requirements.
147.17 Instructional equipment requirements.

- Sec.
147.19 Material, tool, and shop equipment requirements.
147.21 General curriculum requirements.
147.23 Instructor requirements.

Subpart C—Operating Rules

- 147.31 Instruction, attendance, and tests.
147.33 Records.
147.35 Transcripts and graduation certificates.
147.37 Maintenance of facilities, equipment, and material.
147.39 Display of certificates.
147.41 Change of location.
147.43 Inspection.
147.45 Advertising.

AUTHORITY: §§ 147.1 to 147.45 issued under secs. 313(a), 314, 601, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421, and 1427).

Subpart A—General

§ 147.1 Applicability.

This part prescribes the requirements for issuing mechanic school certificates and associated ratings and the general operating rules for the holders of those certificates and ratings.

§ 147.3 Certificate required.

No person may operate as a certificated mechanic school without, or in violation of, a mechanic school certificate issued under this part.

§ 147.5 Application and issue.

(a) An application for a certificate and rating, or for an additional rating, under this part is made on a form and in a manner prescribed by the Administrator, and submitted with—

(1) A description of the proposed curriculum;

(2) A list of the facilities and materials to be used (with photographs of the facilities, if possible);

(3) A list of its instructors, including the kind of certificate and ratings held, the certificate number, and the subjects to be taught by each; and

(4) A statement of the maximum number of students it expects to teach at any one time.

(b) An applicant who meets the requirements of this part is entitled to a mechanic school certificate and associated ratings prescribing such operations specifications and limitations as are necessary in the interests of safety.

§ 147.7 Duration of certificates.

(a) A mechanic school certificate or rating is effective until it is surrendered, suspended, or revoked.

(b) The holder of a certificate that is surrendered, suspended, or revoked, shall return it to the Administrator.

Subpart B—Certification Requirements

§ 147.11 Ratings.

The following ratings are issued under this part:

- (a) Airframe.
(b) Powerplant.
(c) Airframe and powerplant.

§ 147.13 Facilities, equipment, and material requirements.

An applicant for a mechanic school certificate and rating, or for an additional rating, must have at least the

facilities, equipment, and materials specified in §§ 147.15 to 147.19 that are appropriate to the rating he seeks.

§ 147.15 Space requirements.

An applicant for a mechanic school certificate and rating, or for an additional rating, must have such of the following properly heated, lighted, and ventilated facilities as are appropriate to the rating he seeks and as the Administrator determines are appropriate for the maximum number of students expected to be taught at any time:

(a) A classroom (or a drafting room used for classroom purposes when not being used as a drafting room).

(b) A drafting room with drafting tables, T squares, and other necessary drawing equipment.

(c) A stockroom arranged to assure proper separation from the working space for the segregation and protection of parts, tools, materials, and other similar articles.

(d) Suitable separate space in a permanent or temporary structure, with proper temperature control, for doping and paint spraying.

(e) Suitable separate space equipped with wash tank and degreasing equipment with air pressure, or other adequate cleaning equipment.

(f) Suitable separate space with either permanent, portable, or mobile test stands and test clubs for running-in engines.

(g) Suitable separate space, with adequate equipment, including benches, tables, and instruments, to disassemble, repair, assemble, test, service, and inspect—

(1) Ignition, electrical equipment, and appliances;

(2) Carburetors and fuel systems; and

(3) Hydraulic and vacuum systems for aircraft, aircraft engines, and their appliances.

(h) Suitable space, with adequate equipment, including tables, benches, horses, stands, and jacks, for disassembling, inspecting, assembling, and rigging aircraft.

(i) Suitable space, with adequate equipment, for disassembling, inspecting, overhauling, assembling, troubleshooting, and timing engines.

§ 147.17 Instructional equipment requirements.

(a) An applicant for a mechanic school certificate and rating, or for an additional rating, must have such of the following instructional equipment as is appropriate to the rating he seeks:

(1) Various kinds of fuselages, wings (or wing sections, in the case of large aircraft), control surfaces, landing gears, radios, instruments, propellers (including wood and metal fixed pitch and adjustable and controllable metal), and aircraft reciprocating engines (including at least one opposed type, one radial type of at least 350 horsepower, and one supercharged type).

(2) At least one aircraft of a type currently certificated by FAA for private or commercial operation, with powerplant, propeller, instruments, two-way radio,

landing lights, and other equipment and accessories on which a mechanic might be required to work and with which he should be familiar.

(b) The equipment required by paragraph (a) of this section need not be in an airworthy condition. However, if it was damaged, it must have been repaired enough for complete assembly.

(c) Airframes, powerplants, propellers, appliances, and components thereof, on which instruction is to be given, and from which practical working experience is to be gained, must be so diversified as to show the different methods of construction, assembly, inspection, and operation when installed in an aircraft for use. There must be enough units so that not more than eight students will work on any one unit at a time.

(d) If the aircraft used for instructional purposes does not have retractable landing gear and wing flaps, the school must provide training aids, or operational mock-ups of them.

§ 147.19 Material, tool, and shop equipment requirements.

An applicant for a mechanic school certificate and rating, or for an additional rating, must have an adequate supply of material and tools, and such of the shop equipment, special tools, and other miscellaneous tools and equipment as are appropriate to the approved curriculum of the school and are used in constructing and maintaining aircraft, to assure that each student will be properly instructed. The tools and shop equipment must be in satisfactory working condition and of the proper kind for the purpose for which they are to be used.

§ 147.21 General curriculum requirements.

(a) An applicant for a mechanic school certificate and rating, or for an additional rating, must have an approved curriculum that is designed to qualify his students to perform the duties of a mechanic for a particular rating or ratings.

(b) The curriculum must offer at least the following number of hours of instruction for the rating shown:

- (1) Airframe—960 hours.
- (2) Powerplant—960 hours.
- (3) Combined airframe and powerplant—1,650 hours.

(c) An airframe curriculum must cover the following subjects:

- (1) Parts 145, ----, ----, ----, ----, ----, ----, and ---- of this chapter [Presents Parts 1, 3, 4a, 4b, 5, 6, 8, 9, 18, 24, and 43 of this chapter, as appropriate to the curriculum;

(2) Tools, instruments, equipment, their use and care;

(3) Shop practice and procedures, use of forms;

(4) Woodworking;

(5) Welding steel structures and fittings;

(6) Aluminum alloy structures and fittings;

(7) Sheet metal, steel, stainless steel, terneplate, aluminum and aluminum alloy;

(8) Welding, riveting, and heat-treating of steel, stainless steel, aluminum,

aluminum alloy, structure, stock, and fittings;

(9) Controls and control surfaces;

(10) Splicing cables, bonding, brazing, and soldering;

(11) Hydraulic systems;

(12) Vacuum systems;

(13) Electrical systems;

(14) Fuel systems;

(15) Covering, fabric and stressed skin;

(16) Landing gear assembly;

(17) Assembly and rigging;

(18) Appliances; Instruments, radio, floats, flares, heaters, etc.;

(19) Inspection of certificated aircraft, use of forms, etc.;

(20) Aircraft theory and practice;

(21) Mechanical drawing; and

(22) Aircraft weight and balance.

(d) A powerplant curriculum must cover the following subjects:

- (1) Parts 145, ----, ----, ----, ----, ----, ----, and ---- of this chapter [Present Parts 1, 3, 4a, 4b, 5, 6, 8, 9, 18, 24 and 43 of this chapter, as appropriate to the curriculum;

(2) Instruments and equipment, their use and care;

(3) Shop practice and procedures, use of forms;

(4) Fundamental powerplant requirements;

(5) Mechanical drawing;

(6) Powerplant design and construction;

(7) Carburetor and fuel injection systems;

(8) Ignition systems;

(9) Supercharging systems;

(10) Starting, generating, and regulating systems;

(11) Fuels and fuel systems;

(12) Lubrication systems;

(13) Operation and trouble shooting;

(14) Disassembly, overhaul, repair, and assembly;

(15) Inspection, use of inspection tools, theory of magnaflux and fluorescent penetrant;

(16) Block testing;

(17) Propeller installation and maintenance;

(18) Powerplant installation;

(19) Powerplant maintenance;

(20) Turbojet, turboprop, and compound engines;

(21) Theory and principles of powerplant operation;

(22) Aircraft powerplant development; and

(23) Aircraft weight and balance.

(e) The curriculum must be so designed that at least 60 percent of the total curriculum time is spent in shop and laboratory instruction.

§ 147.23 Instructor requirements.

An applicant for a mechanic school certificate and rating, or for an additional rating, must provide such number of instructors holding appropriate mechanic certificates and ratings, as the Administrator determines necessary to provide adequate instruction and supervision of the students. However, he may provide specialized instructors, who are not certificated mechanics, to teach mathematics, physics, drawing, and similar subjects.

Subpart C—Operating Rules

§ 147.31 Instruction, attendance, and tests.

(a) A certificated mechanic school may not require any student to attend classes of instruction more than eight hours in any day or more than six days or 40 hours in any seven-day period.

(b) Each school shall give an appropriate test to each student who completes a subject at that school.

(c) A school may credit a student with instruction he has satisfactorily completed at another mechanic school, accredited college, State-owned vocational or trade school, or military technical specialty school. It may determine the amount of credit to be allowed by giving the applicant an entrance test equal to the one given to students who complete a course or phase at the school, or by an authenticated transcript of his grades from his former school, showing the curriculum in which he was enrolled, the hours of attendance, and his grades in each subject. However, in the case of an applicant with military technical specialty training, it may determine the amount of credit only on the basis of the entrance test.

(d) A school may not change its approved curriculum unless the change is approved in advance.

(e) A school may not have more students enrolled than the number stated in its application for a certificate, unless it amends its application and has it approved.

§ 147.33 Records.

(a) Each certificated mechanic school shall keep a current record of each student enrolled, showing—

(1) His attendance, courses, tests, and grades;

(2) The instruction credited to him under § 147.31(c), if any; and

(3) The authenticated transcript of his grades from that school.

It shall retain the record for at least two years after the end of the student's enrollment, and shall make each record available for inspection by the Administrator during that period.

(b) Each school shall keep a current progress chart or individual progress record for each of its students, showing the practical projects or laboratory work completed, or to be completed, by the student in each phase of his course.

§ 147.35 Transcripts and graduation certificates.

(a) Each certificated mechanic school shall give a transcript of his grades to each student who is graduated from that school or who leaves it before being graduated. An official of the school shall authenticate the transcript. The transcript must state the curriculum and courses in which the student was enrolled, whether the student satisfactorily completed that curriculum and courses, and the final grades he received.

(b) Each school shall give a graduation certificate to each student that it graduates. An official of the school shall authenticate the certificate. The certificate must show the date of graduation.

tion and his average grade, reflecting his standard of performance during the entire course rather than the grades made on his final test.

§ 147.37 Maintenance of facilities, equipment, and material.

(a) Each certificated mechanic school shall provide facilities, equipment, and material equal to the standards currently required for the issue of the certificate and rating that it holds.

(b) A school may not make a substantial change in facilities, equipment, or material that have been approved for a particular curriculum, unless that change is approved in advance.

§ 147.39 Display of certificate.

Each holder of a mechanic school certificate and ratings shall display them at a place in the school that is normally accessible to the public and is not obscured. The certificate must be available for inspection by the Administrator.

§ 147.41 Change of location.

The holder of a mechanic school certificate may not make any change in the school's location unless the change is approved in advance. If the holder desires to change the location he shall notify the Administrator, in writing, at least 30 days before the date the change is contemplated. If he changes its location without approval, the certificate is revoked.

§ 147.43 Inspection.

The Administrator may, at any time, inspect a mechanic school to determine its compliance with this part. Such an inspection is normally made once each six months to determine if the school continues to meet the requirements under which it was originally certificated. After such an inspection is made, the school is notified, in writing, of any deficiencies found during the inspection. Other informal inspections may be made from time to time.

§ 147.45 Advertising.

(a) A certificated mechanic school may not make any statement relating to itself that is false or is designed to mislead any person considering enrollment therein.

(b) Whenever a mechanic school indicates in advertising that it is a certificated school, it shall clearly distinguish between its approved courses and those that are not approved.

PART 147—DISTRIBUTION TABLE

| Former section | Revised section | Former section | Revised section |
|------------------------------|------------------|----------------|-----------------|
| 53.0----- | 147.1 | 53.10----- | 147.41 |
| 53.1----- | (¹) | 53.10-1----- | 147.41 |
| 53.5----- | 147.5 | 53.11----- | 147.43 |
| 53.5-1----- | 147.5 | 53.11-1----- | 147.43 |
| 53.6 (last sentence) -- | 147.3 | 53.11-2----- | 147.43 |
| 53.6 (less last sentence) -- | 147.5 | 53.12----- | 147.5 |
| 53.7----- | 147.7 | 53.13----- | 147.45 |
| 53.7-1----- | 147.7 | 53.14----- | 147.11 |
| 53.8----- | (²) | 53.20----- | 147.5 |
| 53.8-1----- | (²) | 53.20-1----- | 147.5 |
| 53.9----- | 147.39 | 53.21----- | 147.5 |
| 53.9-1----- | 147.39 | 53.21-1----- | 147.31 |
| | | 53.22----- | 147.13 |
| | | 53.23----- | 147.37 |

¹ Transferred to Part 1.

² Executed.

PART 147—DISTRIBUTION TABLE—Continued

| Former section | Revised section | Former section | Revised section |
|---------------------------------------------------|-----------------|------------------------------------|-----------------|
| 53.24----- | 147.15 | 53.42----- | 147.23 |
| 53.24-1----- | 147.15 | 53.42-1----- | 147.23 |
| 53.25----- | 147.17 | 53.50----- | 147.31 |
| 53.25-1----- | 147.17 | 53.51----- | 147.31 |
| 53.25-2----- | 147.17 | 53.52----- | 147.31 |
| 53.26----- | 147.19 | 53.52-1----- | 147.31 |
| 53.26-1----- | 147.19 | 53.53----- | 147.31 |
| 53.27 (less last 12 words of last sentence) ----- | 147.21 | 53.53-1----- | 147.31 |
| 53.27 (last 12 words of last sentence) -- | 147.31 | 53.53-2 (less last sentence) ----- | 147.31 |
| 53.27-1----- | 147.21 | 53.53-2 (last sentence) -- | 147.33 |
| 53.28----- | 147.21 | 53.54----- | 147.35 |
| 53.40----- | 147.21 | 53.55----- | 147.35 |
| 53.40-1----- | 147.21 | 53.55-1----- | 147.35 |
| 53.41----- | 147.21 | 53.56----- | 147.33 |
| 53.41-1----- | 147.21 | 53.56-1----- | 147.33 |
| | | 53.57----- | 147.37 |

PART 149—PARACHUTE LOFTS [NEW]

| Sec. | Applicability. |
|--------|----------------------------------------------------------------|
| 149.1 | Application and issue. |
| 149.3 | Duration of certificate. |
| 149.5 | Cooperation during inspection or test. |
| 149.7 | Persons authorized to maintain or alter parachutes. |
| 149.9 | Ratings. |
| 149.11 | Eligibility requirements: General. |
| 149.13 | Reports and records. |
| 149.15 | Maintenance of personnel, facilities, equipment, and material. |
| 149.17 | Maintenance and alteration standards. |
| 149.19 | Material standards. |
| 149.21 | Drop testing. |
| 149.23 | Display of certificate. |
| 149.25 | Change of location. |
| 149.27 | |

AUTHORITY: §§ 149.1 to 149.27 issued under secs. 313(a), 314, 601, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421, and 1427).

§ 149.1 Applicability.

This part prescribes the requirements for issuing parachute loft certificates and associated ratings and the general operating rules for the holders of those certificates and ratings.

§ 149.3 Application and issue.

(a) An application for a certificate and rating, or for an additional rating, under this part is made on a form and in a manner prescribed by the Administrator.

(b) An applicant who meets the requirements of this part is entitled to a parachute loft certificate and appropriate ratings.

(c) The holder of a parachute loft certificate that has been revoked may not apply for a certificate and rating under this part for one year after it is revoked, unless the order of revocation provides otherwise.

§ 149.5 Duration of certificate.

(a) A parachute loft certificate is effective until it is surrendered, suspended, or revoked. However, the Administrator may cancel such a certificate at any time within 60 days after the date it is issued.

(b) The holder of a parachute loft certificate that is surrendered, suspended, or revoked, shall upon the Administra-

tor's request, return it to the Administrator.

§ 149.7 Cooperation during inspection or test.

Upon the Administrator's request, each applicant for a parachute loft certificate must, and each holder of such a certificate shall, cooperate fully during any inspection or test of him, or his personnel, facilities, equipment, and records, by the Administrator.

§ 149.9 Persons authorized to maintain or alter parachutes.

(a) Only the following persons may maintain or alter a parachute:

(1) Any person as authorized by Part 65 of this chapter.

(2) A certificated parachute loft with an appropriate rating.

(3) The manufacturer.

(4) Any other manufacturer that the Administrator considers to be competent.

(b) Each person who maintains or alters a parachute (except the main parachute of a dual parachute pack used for intentional jumping) must perform that maintenance or make that alteration in accordance with approved manuals and specifications.

§ 149.11 Ratings.

(a) The following ratings are issued under this part:

(1) Packing and general maintenance (not including major repair, inspection, or overhaul).

(2) Canopy overhaul.

(3) Harness overhaul.

(4) Metal parts and container overhaul.

(5) Drop testing.

(b) A parachute loft rating record is attached to each certificate issued under this part. It contains the names of the ratings issued to the holder of the certificate.

§ 149.13 Eligibility requirements: general.

To be eligible for a parachute loft certificate and associated ratings, or for an additional rating, an applicant must—

(a) Have personnel who are certificated and appropriately rated under Part 65 of this chapter and who are qualified to perform or supervise the kind of work for which the applicant seeks a rating; and

(b) Have the facilities, equipment, and material necessary to do efficiently the kind of work for which he seeks a rating, including suitable housing that is adequately heated, lighted, and ventilated, an adequate inspection system, adequate drawing equipment, and adequate facilities for segregating and storing parts and materials.

§ 149.15 Reports and records.

(a) Each holder of a parachute loft certificate shall make an adequate record of all work done by him, including the names of the persons doing the work. He shall keep each record made for at least two years after the work is done.

(b) Each holder of a parachute loft certificate shall report, on a form prescribed by the Administrator, any recurring or serious defect, or other unair-

worthy conditions, that he finds in a parachute or a part thereof.

§ 149.17 Maintenance of personnel, facilities, equipment, and material.

Each holder of a parachute loft certificate shall maintain personnel, facilities, equipment, and material at least equal to that currently required by § 149.13 for the issue of the certificate and ratings he holds.

§ 149.19 Maintenance and alteration standards.

Each holder of a parachute loft certificate shall perform maintenance and alteration operations in a workmanlike manner so as to maintain the article worked on in, or restore it to, an airworthy condition.

§ 149.21 Material standards.

Each holder of a parachute loft certificate shall use materials of proper strength and quality for the maintenance or alteration operation being performed.

§ 149.23 Drop testing.

(a) Only the following may drop test a parachute:

- (1) The manufacturer.
- (2) Any other manufacturer that the Administrator considers to be competent.
- (3) A certificated parachute loft with a drop testing rating.

(b) Each holder of a parachute loft certificate shall drop test each parachute on which he has performed a major repair or alteration on a canopy, harness, container, accessory, or any combination of them, whenever the certificated master parachute rigger who inspected it considers that the repair or alteration may have affected the structural, functional, or other airworthiness characteristic of the article.

(c) Whenever it is necessary to determine the functional characteristics of an entire parachute assembly, the loft shall drop test it with a 150 pound dummy man (not including the weight of the parachute) at an indicated airspeed of 70 miles an hour and an altitude of at least 500 feet above the ground.

(d) Whenever it is necessary to determine the material strength values in an entire parachute assembly, or the material airworthiness of the entire assembly before maintenance, the loft shall drop test it with a 190 pound dummy man (not including the weight of the parachute) at an indicated airspeed of 120 miles an hour and an altitude of at least 500 feet above the ground.

§ 149.25 Display of certificate.

Each holder of a parachute loft certificate and ratings shall display them in a prominent place in the parachute loft.

§ 149.27 Change of location.

The holder of a parachute loft certificate may not make any change in the loft's location unless the change is approved, in writing, in advance. If the holder desires to change the location he shall mail the request to the Assistant Administrator of the region in which the loft is located.

PART 149—DISTRIBUTION TABLE

| Former section | Revised section | Former section | Revised section |
|----------------|-----------------|----------------|------------------|
| 54.1----- | 149.11 | 54.15----- | 149.15 |
| 54.2----- | 149.13 | 54.16----- | 149.11 |
| 54.3----- | 149.3 | 54.17----- | 149.15 |
| 54.4----- | 149.5 | 54.18----- | 149.17 |
| 54.5----- | 149.3 | 54.19----- | 149.19 |
| 54.6----- | 149.27 | 54.20----- | 149.21 |
| 54.10----- | 149.25 | 54.21----- | 149.15 |
| 54.11----- | 149.3 | 54.22----- | 149.9 |
| 54.12----- | 149.5 | 54.23----- | 149.23 |
| 54.13----- | 149.7 | 54.30----- | (¹) |
| 54.14----- | 149.3 | | |

¹ Transferred to Part 1.

[F.R. Doc. 62-6791; Filed, July 12, 1962; 8:45 a.m.]

Chapter III—Federal Aviation Agency

SUBCHAPTER C—AIRCRAFT REGULATIONS

[Reg. Docket No. 1286; Amdt. 463]

PART 507—AIRWORTHINESS DIRECTIVES

Piaggio Model P.166 Aircraft

Cracks have been found in the angle bar at the fuselage frame attachment of the elevator control sector bracket on Piaggio Model P.166 aircraft. Complete failure at this point can cause loss of control of the aircraft. As this condition is likely to occur in other such aircraft, an airworthiness directive is being issued to require inspection of the angle bar.

As a situation exists which demands immediate action in the interest of safety, it is found that notice and public procedure hereon are impracticable and good cause exists for making this amendment effective in less than 30 days after date of publication in the FEDERAL REGISTER.

In consideration of the foregoing, and pursuant to the authority delegated to me by the Administrator (25 F.R. 6489), § 507.10(a) of Part 507 (14 CFR Part 507), is hereby amended by adding the following new airworthiness directive:

PIAGGIO. Applies to Model P.166 aircraft, Serial Numbers 341 to 403 inclusive.

Compliance required as indicated. In order to preclude failure of the frame 20 angle bar at the attachment of the elevator control sector bracket, accomplish the following:

(a) Within the next 10 hours' time in service after the effective date of this AD and thereafter within each 20 hours' time in service, inspect the frame 20 angle bar for cracks in the area of the elevator control sector bracket attachment.

(b) If cracks are found, repair in accordance with the procedures specified under Second Assumption in Piaggio Service Bulletin 166-16, or FAA approved equivalent prior to further flight. When this has been accomplished the inspections required in (a) may be discontinued.

(c) The inspections required in (a) may be discontinued after incorporating the reinforcement specified under First Assumption in Piaggio Service Bulletin 106-16 or FAA approved equivalent.

This amendment shall become effective July 20, 1962.

(Sec. 313(a), 601, 603; 72 Stat. 752, 775, 776; 49 U.S.C. 1354(a), 1421, 1423)

Issued in Washington, D.C., on July 6, 1962.

G. S. MOORE,
Acting Director,
Flight Standards Service.

[F.R. Doc. 6820; Filed, July 12, 1962; 8:45 a.m.]

SUBCHAPTER E—AIR NAVIGATION REGULATIONS

[Airspace Docket No. 62-WA-73]

PART 600—DESIGNATION OF FEDERAL AIRWAYS

Alteration

The Federal Aviation Agency is converting the Neah Bay, Wash., radio range to a radio beacon effective July 26, 1962. This action will be reflected on aeronautical charts.

The purpose of these amendments to the Regulations of the Administrator is to change the name "Neah Bay, Wash., radio range" to "Neah Bay, Wash., radio beacon" wherever it appears in §§ 600.6004, 600.6287, and 600.1506.

Since these changes are editorial in nature and will not assign or reassign the use of navigable airspace, notice and public procedure hereon are unnecessary.

In consideration of the foregoing, and pursuant to the authority delegated to me by the Administrator (25 F.R. 12582) the following actions are taken:

1. In the text of § 600.6004 (14 CFR 600.6004, 27 F.R. 1595, 4809) "Neah Bay, Wash., RR" is deleted and "Neah Bay, Wash., RBN" is substituted therefor.

2. In the text of § 600.6287 (27 F.R. 98) "Neah Bay, Wash., radio range," is deleted and "Neah Bay, Wash., RBN," is substituted therefor.

3. In the text of § 600.1506 (26 F.R. 1081, 27 F.R. 4511) "Neah Bay, Wash., RR 10-mile-wide airway to the INT of the 112° bearing from the Neah Bay RR" is deleted and "Neah Bay, Wash., RBN 10-mile-wide airway to the INT of the 112° bearing from the Neah Bay RBN" is substituted therefor.

These amendments shall become effective 0001 e.s.t., July 26, 1962.

(Sec. 307(a), 72 Stat. 749; 49 U.S.C. 1348)

Issued in Washington, D.C., on July 9, 1962.

D. D. THOMAS,
Director, Air Traffic Service.

[F.R. Doc. 62-6822; Filed, July 12, 1962; 8:45 a.m.]

[Airspace Docket No. 62-EA-52]

PART 601—DESIGNATION OF CONTROLLED AIRSPACE, REPORTING POINTS, POSITIVE CONTROL ROUTE SEGMENTS, AND POSITIVE CONTROL AREAS

Alteration of Control Zone

The purpose of this amendment to § 601.2302 of the regulations of the Administrator is to alter the description of the Willow Grove, Pa., control zone.

The Willow Grove control zone is presently designated, in part, with reference

to the Navy Willow Grove radio range. The Department of the Navy has stated that there is no longer a requirement for retention of the Navy Willow Grove radio range. The Federal Aviation Agency concurs with this determination and action is taken herein to revoke the control zone extensions based on this facility.

Since the change effected by this amendment is less restrictive in nature than present requirements, and imposes no additional burden on any person, notice and public procedure hereon are unnecessary and it may be made effective upon publication in the FEDERAL REGISTER.

In consideration of the foregoing, and pursuant to the authority delegated to me by the Administrator (25 F.R. 12582) § 601.2302 (14 CFR 601.2302) is amended to read:

§ 601.2302 Willow Grove, Pa., control zone.

Within a 5-mile radius of latitude 40°11'40" N., longitude 75°06'25" W., and within 2 miles either side of the Yardley, Pa., VOR 246° radial extending from the 5-mile radius zone to the VOR.

This amendment shall become effective upon publication in the FEDERAL REGISTER.

(Sec. 307(a), 72 Stat. 749; 49 U.S.C. 1348)

Issued in Washington, D.C., on July 9, 1962.

D. D. THOMAS,
Director, Air Traffic Service.

[F.R. Doc. 62-6821; Filed, July 12, 1962; 8:45 a.m.]

Title 43—PUBLIC LANDS: INTERIOR

Chapter I—Bureau of Land Management, Department of the Interior

APPENDIX—PUBLIC LAND ORDERS

[Public Land Order 2719]

[Sacramento 057206]

CALIFORNIA

Withdrawing Public Lands for Protection of Recreation Values

By virtue of the authority vested in the President and pursuant to Executive Order No. 10355 of May 26, 1952, it is ordered as follows:

1. Subject to valid existing rights and to existing withdrawals for power purposes, the following-described public lands are hereby withdrawn from all forms of appropriation under the public land laws, including the mining laws, but not the mineral leasing laws, lease or sale under the act of June 4, 1954 (68 Stat. 173; 43 U.S.C. 869) to the State of California or to a political subdivision thereof, and sales of materials under the act of July 31, 1947 (61 Stat. 681; 30 U.S.C. 601), as amended, and reserved under jurisdiction of the Bureau of Land Management, Department of the Interior, for the preservation of public recreational values, and for the development, conser-

vation, utilization and maintenance of their wildlife and fishery resources:

MOUNT DIABLO MERIDIAN

Goat Island

T. 29 N., R. 3 W.,
Sec. 3, lot 7;
Sec. 10, lot 9.

Aggregating 41.16 acres, and comprising an island in the Sacramento River.

2. For the purpose of furthering the objectives of this order, the Bureau of Land Management may cooperate with the Bureau of Sport Fisheries and Wildlife and the State of California (through its appropriate agencies or instrumentalities) in the management of the lands and their resources.

FRANK P. BRIGGS,
Assistant Secretary of the Interior.

July 6, 1962.

[F.R. Doc. 62-6827; Filed, July 12, 1962; 8:45 a.m.]

[Public Land Order 2720]

[Arizona 031065]

ARIZONA

Revoking Public Water Reserves

By virtue of the authority vested in the President by section 1 of the Act of June 25, 1910 (35 Stat. 847; 43 U.S.C. 141), and pursuant to Executive Order No. 10355 of May 26, 1952, it is ordered as follows:

1. The Executive Order of February 20, 1913, creating Public Water Reserve No. 9, Arizona No. 1, as modified by the Executive Order of July 19, 1919, the Executive Order of March 3, 1913, creating Public Water Reserve No. 9, Arizona No. 2, as modified by Executive Order No. 3675 of May 19, 1922, the Executive Order of August 25, 1916, creating Public Water Reserve No. 37, Arizona No. 6, and any other order or orders withdrawing lands for public water reserves or orders amendatory thereof, are hereby revoked so far as they affect the following-described lands:

GILA AND SALT RIVER MERIDIAN

T. 8 N., R. 1 E.,
Sec. 14, W $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$;
Sec. 15, NE $\frac{1}{4}$ NE $\frac{1}{4}$.
T. 9 N., R. 1 E.,
Sec. 21, SE $\frac{1}{4}$ and SE $\frac{1}{4}$ SW $\frac{1}{4}$;
Sec. 28, N $\frac{1}{2}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$.
T. 7 N., R. 2 E.,
Sec. 15, SE $\frac{1}{4}$ NE $\frac{1}{4}$.
T. 8 N., R. 2 W.,
Sec. 28, SW $\frac{1}{4}$ NE $\frac{1}{4}$ and NW $\frac{1}{4}$ SE $\frac{1}{4}$.
T. 6 N., R. 3 E.,
Sec. 13, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
Sec. 16, SE $\frac{1}{4}$ NE $\frac{1}{4}$;
Sec. 24, NW $\frac{1}{4}$ NW $\frac{1}{4}$.
T. 9 N., R. 3 E.,
Sec. 9, E $\frac{1}{2}$ NW $\frac{1}{4}$.
T. 39 N., R. 3 E. (unsurveyed). All land lying within $\frac{1}{4}$ mile of South Cove Spring and $\frac{1}{4}$ mile of North Cove Spring which will be when surveyed, approximately sec. 2.
Sec. 3, SE $\frac{1}{4}$;
Sec. 10, NE $\frac{1}{4}$;
Sec. 11, W $\frac{1}{2}$ SW $\frac{1}{4}$ and NW $\frac{1}{4}$ SE $\frac{1}{4}$.
T. 40 N., R. 3 E.,
Sec. 34, SE $\frac{1}{4}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$. All land within $\frac{1}{4}$ mile of North and South Cove Spring (unsurveyed).

T. 41 N., R. 3 E.,
Sec. 13, NW $\frac{1}{4}$ SW $\frac{1}{4}$.
T. 40 N., R. 8 E.,
Sec. 18, lot 3.
T. 18 N., R. 12 E.,
Sec. 26, W $\frac{1}{2}$ NW $\frac{1}{4}$ and SE $\frac{1}{4}$ NW $\frac{1}{4}$.
T. 1 N., R. 16 E.,
Sec. 30, NW $\frac{1}{4}$ NW $\frac{1}{4}$.
T. 9 N., R. 30 E.,
Sec. 6, lots 3, 4, 5, and 6.
T. 8 N., R. 31 E.,
Sec. 11, lots 1, 2, 3, and 4.
T. 15 N., R. 31 E.,
Sec. 18, lot 2.
T. 8 N., R. 1 W.,
Sec. 20, lots 2 and 4.
T. 41 N., R. 1 W.,
T. 42 N., R. 6 W. (unsurveyed). All land within $\frac{1}{4}$ mile 8-mile Spring which when surveyed will be in approximately sec. 32.
T. 12 N., R. 3 W.,
Sec. 31, S $\frac{1}{2}$ NE $\frac{1}{4}$ and N $\frac{1}{2}$ SE $\frac{1}{4}$.
T. 12 N., R. 4 W.,
Sec. 33, S $\frac{1}{2}$ SE $\frac{1}{4}$.
T. 20 N., R. 4 W.,
Sec. 8, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$, and SW $\frac{1}{4}$ SW $\frac{1}{4}$.
T. 37 N., R. 4 W.,
Sec. 8, NW $\frac{1}{4}$ (unsurveyed);
Sec. 16, NW $\frac{1}{4}$.
T. 40 N., R. 4 W.,
Sec. 17, S $\frac{1}{2}$ SE $\frac{1}{4}$.
T. 10 N., R. 5 W.,
Sec. 24, E $\frac{1}{2}$ SE $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$.
T. 39 N., R. 5 W.,
Sec. 17, SW $\frac{1}{4}$ SE $\frac{1}{4}$.
T. 38 N., R. 6 W.,
Sec. 4, lots 1, 2, and 3.
T. 42 N., R. 6 W. (unsurveyed). All land within $\frac{1}{4}$ mile Lost Spring or when surveyed approximately sec. 32.
T. 35 N., R. 7 W.,
Sec. 33, NW $\frac{1}{4}$.
T. 38 N., R. 7 W. (unsurveyed). All land within $\frac{1}{4}$ mile Clay Holes which will be located, when surveyed, in approximately NW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, and NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5.
T. 41 N., R. 7 W.,
Sec. 3, SE $\frac{1}{4}$ and S $\frac{1}{2}$ SE $\frac{1}{4}$;
Sec. 7, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
Sec. 10, N $\frac{1}{2}$ N $\frac{1}{2}$ and S $\frac{1}{2}$ NW $\frac{1}{4}$;
Sec. 14, S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, and SE $\frac{1}{4}$ SW $\frac{1}{4}$;
Sec. 16, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
Sec. 23, N $\frac{1}{2}$ NE $\frac{1}{4}$;
Sec. 24, NW $\frac{1}{4}$ NW $\frac{1}{4}$.
T. 13 N., R. 8 W.,
Sec. 20, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
Sec. 21, NW $\frac{1}{4}$ SW $\frac{1}{4}$;
Sec. 29, NW $\frac{1}{4}$ SW $\frac{1}{4}$;
Sec. 30, N $\frac{1}{2}$ SE $\frac{1}{4}$.
T. 15 N., R. 8 W.,
Sec. 22, NE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, and W $\frac{1}{2}$ SW $\frac{1}{4}$;
Sec. 33, SW $\frac{1}{4}$ NW $\frac{1}{4}$.
T. 25 N., R. 8 W. (unsurveyed). All land within $\frac{1}{4}$ mile of Indian Spring or will be when surveyed approximately sec. 17.
T. 34 N., R. 8 W.,
Sec. 16, SE $\frac{1}{4}$;
Sec. 19, E $\frac{1}{2}$ NW $\frac{1}{4}$.
T. 13 N., R. 9 W.,
Sec. 10, E $\frac{1}{2}$ SW $\frac{1}{4}$ and NW $\frac{1}{4}$ SE $\frac{1}{4}$;
Sec. 20, W $\frac{1}{2}$ NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$.
T. 34 N., R. 9 W.,
Sec. 17, NW $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$.
T. 13 N., R. 10 W.,
Sec. 11, SE $\frac{1}{4}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ NE $\frac{1}{4}$.
T. 36 N., R. 10 W.,
Sec. 5, N $\frac{1}{2}$ SW $\frac{1}{4}$;
Sec. 6, NE $\frac{1}{4}$ SE $\frac{1}{4}$;
Sec. 13, S $\frac{1}{2}$ NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$;
Sec. 22, SE $\frac{1}{4}$ SW $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$;
Sec. 34, SE $\frac{1}{4}$ NE $\frac{1}{4}$.
T. 15 N., R. 11 W. (unsurveyed). All land within $\frac{1}{4}$ mile of Keyser's Spring which will be located, when surveyed, in approximately sec. 31 SW $\frac{1}{4}$ NW $\frac{1}{4}$.
T. 29 N., R. 11 W.,
Sec. 23, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, and NW $\frac{1}{4}$ SE $\frac{1}{4}$.

RULES AND REGULATIONS

T. 31 N., R. 11 W.,
 Sec. 9, S $\frac{1}{2}$;
 Sec. 16, N $\frac{1}{2}$;
 Sec. 22, S $\frac{1}{2}$ NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$.
 T. 32 N., R. 11 W.,
 Sec. 10, S $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
 Sec. 23, W $\frac{1}{2}$ SW $\frac{1}{4}$.
 T. 35 N., R. 11 W.,
 Sec. 33, NE $\frac{1}{4}$.
 T. 36 N., R. 11 W.,
 Sec. 2, NE $\frac{1}{4}$ (lots 1, 2, and S $\frac{1}{2}$ NE $\frac{1}{4}$);
 Sec. 16, NW $\frac{1}{4}$.
 T. 37 N., R. 11 W.,
 Sec. 1, lot 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$;
 Sec. 2, lot 1, SE $\frac{1}{4}$ NE $\frac{1}{4}$;
 Sec. 13, NE $\frac{1}{4}$;
 Sec. 15, SW $\frac{1}{4}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ SW $\frac{1}{4}$.
 T. 40 N., R. 11 W. (unsurveyed). All land within $\frac{1}{4}$ mile Clay Spring or when surveyed will be located in approximately sec. 34. All land within $\frac{1}{4}$ mile Blake Pond or when surveyed will be located in approximately sec. 12.
 T. 30 N., R. 12 W. (unsurveyed). All land within $\frac{1}{4}$ mile Cottonwood Spring or when surveyed will be approximately sec. 26.
 T. 31 N., R. 12 W.,
 Sec. 8, S $\frac{1}{2}$ SE $\frac{1}{4}$;
 Sec. 17, N $\frac{1}{2}$ NE $\frac{1}{4}$.
 T. 32 N., R. 12 W.,
 Sec. 21, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 28, SE $\frac{1}{4}$.
 T. 33 N., R. 12 W.,
 Sec. 25, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 26, E $\frac{1}{2}$ SW $\frac{1}{4}$ and SE $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 35, N $\frac{1}{2}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$.
 T. 34 N., R. 12 W.,
 Sec. 10, W $\frac{1}{2}$;
 Sec. 18, lot 4.
 T. 35 N., R. 12 W.,
 Sec. 6, NW $\frac{1}{4}$ NW $\frac{1}{4}$ (unsurveyed).
 T. 36 N., R. 12 W.,
 Sec. 9, E $\frac{1}{2}$ and E $\frac{1}{2}$ W $\frac{1}{2}$;
 Sec. 31, lot 4.
 T. 37 N., R. 12 W.,
 Sec. 14, SE $\frac{1}{4}$ SW $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 23, NW $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ NW $\frac{1}{4}$.
 T. 39 N., R. 12 W.,
 Sec. 21, S $\frac{1}{2}$ NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$;
 Sec. 24, NW $\frac{1}{4}$ NE $\frac{1}{4}$ and SW $\frac{1}{4}$;
 Sec. 25, NW $\frac{1}{2}$;
 Sec. 26, E $\frac{1}{2}$ NE $\frac{1}{4}$;
 Sec. 30, E $\frac{1}{2}$ NW $\frac{1}{4}$;
 Sec. 33, E $\frac{1}{2}$ SW $\frac{1}{4}$ and W $\frac{1}{2}$ SE $\frac{1}{4}$.
 T. 40 N., R. 12 W. (unsurveyed). All land within $\frac{1}{4}$ mile Quail Spring, or when surveyed will be approximately secs. 27, 28, 33, and 34.
 T. 30 N., R. 13 W. (unsurveyed). All land within $\frac{1}{4}$ mile Neilson Spring, or when surveyed will be approximately sec. 14.
 T. 31 N., R. 13 W.,
 Sec. 7, NE $\frac{1}{4}$ NE $\frac{1}{4}$.
 T. 32 N., R. 13 W.,
 Sec. 22, NE $\frac{1}{4}$.
 T. 34 N., R. 13 W.,
 Sec. 13, SE $\frac{1}{4}$ SE $\frac{1}{4}$.
 T. 35 N., R. 13 W.,
 Sec. 3, lot 3, SE $\frac{1}{4}$ NW $\frac{1}{4}$.
 T. 36 N., R. 13 W.,
 Sec. 22, E $\frac{1}{2}$ NE $\frac{1}{4}$;
 Sec. 23, W $\frac{1}{2}$ NW $\frac{1}{4}$;
 Sec. 26, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 35, N $\frac{1}{2}$ NW $\frac{1}{4}$;
 Sec. 36, SE $\frac{1}{4}$ SE $\frac{1}{4}$.
 T. 37 N., R. 13 W. (unsurveyed). All land within $\frac{1}{4}$ mile Cane Creek, or when surveyed will be approximately sec. 7.
 T. 39 N., R. 13 W.,
 Sec. 17, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 18, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 19, NE $\frac{1}{4}$ NE $\frac{1}{4}$;
 Sec. 20, NW $\frac{1}{4}$ NW $\frac{1}{4}$.
 T. 40 N., R. 13 W. (unsurveyed). All land within $\frac{1}{4}$ mile Nokiac Spring, or when surveyed will be approximately sec. 13.
 T. 32 N., R. 14 W.,
 Sec. 13, W $\frac{1}{2}$ NW $\frac{1}{4}$.
 T. 38 N., R. 14 W.,
 Sec. 15, SE $\frac{1}{4}$ NE $\frac{1}{4}$.

T. 20 N., R. 15 W.,
 Sec. 30, N $\frac{1}{2}$ SE $\frac{1}{4}$.
 T. 36 N., R. 16 W.,
 Sec. 5, SE $\frac{1}{4}$ NE $\frac{1}{4}$;
 Sec. 7, SE $\frac{1}{4}$ NE $\frac{1}{4}$.
 T. 28 N., R. 17 W.,
 Sec. 23, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 24, SW $\frac{1}{4}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 26, NE $\frac{1}{4}$ NE $\frac{1}{4}$.
 T. 26 N., R. 18 W.,
 Sec. 24, N $\frac{1}{2}$ S $\frac{1}{2}$.
 T. 22 N., R. 19 W.,
 Sec. 30, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$.
 T. 24 N., R. 19 W.,
 Sec. 2, NW $\frac{1}{4}$ SW $\frac{1}{4}$.
 T. 26 N., R. 19 W. (unsurveyed). All land within $\frac{1}{4}$ mile Mount Spring or will be when surveyed approximately sec. 21.
 T. 21 N., R. 20 W.,
 Sec. 2, NW $\frac{1}{4}$ SE $\frac{1}{4}$.
 T. 3 S., R. 7 W. (unsurveyed). All land within $\frac{1}{4}$ mile Wolsey's Tank located in what will be, when surveyed, approximately sec. 1.
 T. 17 S., R. 7 W. (unsurveyed). All land within $\frac{1}{4}$ mile of an unnamed spring and located in what will be, when surveyed, approximately SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17.
 T. 2 S., R. 12 E.,
 Sec. 14, SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, and NW $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 30, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 31, NE $\frac{1}{4}$ NE $\frac{1}{4}$.
 T. 20 S., R. 12 E.,
 Sec. 33, SE $\frac{1}{4}$ SW $\frac{1}{4}$.
 T. 21 S., R. 12 E.,
 Sec. 4, NE $\frac{1}{4}$ NW $\frac{1}{4}$ (lot 3).
 T. 4 S., R. 13 E.,
 Sec. 28, SE $\frac{1}{4}$ SE $\frac{1}{4}$.
 T. 5 S., R. 14 E.,
 Sec. 18, SW $\frac{1}{4}$ SW $\frac{1}{4}$ (lot 4).
 T. 3 S., R. 15 E.,
 Sec. 11, SW $\frac{1}{4}$ SW $\frac{1}{4}$ and E $\frac{1}{2}$ SE $\frac{1}{4}$;
 Sec. 12, W $\frac{1}{2}$ SW $\frac{1}{4}$.
 T. 4 S., R. 15 E.,
 Sec. 16, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 19, lot 1.
 T. 22 S., R. 15 E.,
 Sec. 15, lots 2, 3, and SE $\frac{1}{4}$ NW $\frac{1}{4}$.
 T. 3 S., R. 16 E. (unsurveyed). All lands within $\frac{1}{4}$ mile Yellow Jacket Spring which will be located, when surveyed, in approximately NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7.
 T. 8 S., R. 16 E.,
 Sec. 21, NW $\frac{1}{4}$;
 Sec. 29, SE $\frac{1}{4}$ SW $\frac{1}{4}$.
 T. 18 S., R. 16 E.,
 Sec. 26, SW $\frac{1}{4}$ NW $\frac{1}{4}$ and SW $\frac{1}{4}$;
 Sec. 35, NW $\frac{1}{4}$.
 T. 3 S., R. 17 E.,
 Sec. 18, SW $\frac{1}{4}$ SW $\frac{1}{4}$ (lot 5).
 T. 8 S., R. 18 E.,
 Sec. 22, SW $\frac{1}{4}$ NE $\frac{1}{4}$ and SW $\frac{1}{4}$ NW $\frac{1}{4}$.
 T. 13 S., R. 19 E.,
 Sec. 30, lots 3 and 4.
 T. 19 S., R. 19 E.,
 Sec. 29, NE $\frac{1}{4}$ SE $\frac{1}{4}$.
 T. 5 S., R. 20 E.,
 Sec. 19, lot 1.
 T. 13 S., R. 20 E.,
 Sec. 3, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 10, NW $\frac{1}{4}$ NW $\frac{1}{4}$;
 Sec. 11, SE $\frac{1}{4}$ NE $\frac{1}{4}$;
 Sec. 34, S $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, and NW $\frac{1}{4}$ SE $\frac{1}{4}$.
 T. 12 S., R. 21 E.,
 Sec. 19, NW $\frac{1}{4}$ NW $\frac{1}{4}$ (lot 1).
 T. 12 S., R. 22 E.,
 Sec. 5, NW $\frac{1}{4}$ NE $\frac{1}{4}$ (lot 1);
 Sec. 17, NW $\frac{1}{4}$ SE $\frac{1}{4}$.
 T. 15 S., R. 22 E.,
 Sec. 20, N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$, and NE $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 30, S $\frac{1}{2}$ N $\frac{1}{2}$;
 Sec. 31, NW $\frac{1}{4}$.
 T. 5 S., R. 26 E.,
 Sec. 27, NW $\frac{1}{4}$ NW $\frac{1}{4}$;
 Sec. 28, NE $\frac{1}{4}$ NE $\frac{1}{4}$.
 T. 5 S., R. 27 E.,
 Sec. 12, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 13, NE $\frac{1}{4}$ NE $\frac{1}{4}$.

T. 7 S., R. 30 E.,
 Sec. 3, SW $\frac{1}{4}$ NE $\frac{1}{4}$.
 T. 6 S., R. 32 E.,
 Sec. 19, SW $\frac{1}{4}$ SE $\frac{1}{4}$.

The areas described, including the public, nonpublic, and national forest lands, total in the aggregate approximately 18,212 acres. Some of the public lands are withdrawn for other purposes. The national forest lands are in the Tonto and Coronado National Forests.

2. At 10:00 a.m. on August 14, 1962, the national forest lands shall be open to such forms of disposition as may by law be made of national forest lands.

3. The public lands released from withdrawal by this order are hereby restored to the operation of the public land laws, subject to valid existing rights and equitable claims, the requirements of applicable law, rules and regulations and the provisions of any existing withdrawals provided, that, until 10:00 a.m. on January 7, 1963, the State of Arizona shall have a preferred right of application to select the lands in accordance with subsection (c) of section 2 of the Act of August 27, 1958 (72 Stat. 928; 43 U.S.C. 851, 852). The lands have been open to applications and offers under the mineral leasing laws and to location for metalliferous minerals. They will be open to location for nonmetalliferous minerals under the United States mining laws at 10:00 a.m. on January 7, 1963.

Inquiries concerning the lands should be addressed to the Manager, Land Office, Bureau of Land Management, Phoenix, Arizona.

FRANK P. BRIGGS,
 Assistant Secretary of the Interior.

JULY 9, 1962.

[F.R. Doc. 62-6828; Filed, July 12, 1962; 8:45 a.m.]

Title 49—TRANSPORTATION

Chapter I—Interstate Commerce Commission

SUBCHAPTER B—CARRIER BY MOTOR VEHICLE [Ex Parte Nos. MC-5, 159]

PART 174—SURETY BONDS AND POLICIES OF INSURANCE

SUBCHAPTER D—FREIGHT FORWARDERS

PART 405—SURETY BONDS AND POLICIES OF INSURANCE

Insurance and Surety Companies; State Authority and Designation of Agent

At a session of Motor Carrier Board No. 1, held at its office in Washington, D.C., on the 2d day of July A.D. 1962.

In the matter of security for the protection of the public as provided in Part II of the Interstate Commerce Act, and of rules and regulations governing filing of surety bonds, certificates of insurance, qualifications as a self-insurer, or other securities and agreements by motor carriers and brokers subject to Part II of the Interstate Commerce Act, Ex Parte No. MC-5; in the matter of security for the protection of the public as provided

in Part IV of the Interstate Commerce Act, and of rules and regulations governing filing and approval of surety bonds, policies of insurance, qualifications as a self-insurer, or other securities and agreements by freight forwarders subject to Part IV of the Act, Ex Parte No. 159.

It appearing that notice was given by notice of proposed rule making, dated May 18, 1962, published in 27 F.R. 5003, May 29, 1962, pursuant to section 4(a) of the Administration Procedure Act (60 Stat. 237, 5 U.S.C. 1003) of the proposed revision of § 174.8(a) of Part 174 (49 CFR 174.8(a)) of the Code of Federal Regulations governing the filing of insurance or other security for the protection of the public, under the authority contained in section 215 of the Interstate Commerce Act (49 Stat. 557, as amended; 49 U.S.C. 315), and the proposed revision of § 405.6(a) of Part 405 (49 CFR 405.6(a)) of the Code of Federal Regulations governing the filing of insurance or other security for the protection of the public, under the authority contained in section 403 (c) and (d) of the Interstate Commerce Act (56 Stat. 285; 49 U.S.C. 1003).

It further appearing that no written statements of facts, opinions or arguments concerning the herein proposed revision were filed with the Commission by interested parties within thirty days from the publication date.

It is ordered, That § 174.8(a) of Part 174 of the Code of Federal Regulations be, and it is hereby, revised to read as follows:

§ 174.8 Insurance and surety companies; authorized.

(a) *State authority and designation of agent.* No certificate of insurance or surety bond will be accepted by the Commission under these sections unless written or issued by an insurance or surety

company legally authorized to issue policies of the type indicated by such certificate or surety bond, as the case may be, in each State in which the motor carrier is authorized to operate under Part II of the Interstate Commerce Act and such company fully complies with paragraph (b) of this section: *Provided, however,* That in lieu of the licensing requirement with respect to any State except that in which the motor carrier has its principal place of business or domicile, the company will file with the Commission an agreement stating that with respect to any State requested it will furnish the Commission a designation in writing of the name and address of a person upon whom process issued by or under the authority of any court having jurisdiction of the subject matter may be served in any proceeding at law or equity brought in such State against such company. Such agreement shall be effective so long as the company is authorized to file security with the Commission, and thereafter with respect to any claims arising during the effectiveness of any previously filed certificates or surety bonds.

(Sec. 215, 49 Stat. 557, as amended; 49 U.S.C. 315)

It is further ordered, That § 405.6(a) of Part 405 of the Code of Federal Regulations be, and it is hereby, revised to read as follows:

§ 405.6 Insurance and surety companies.

(a) *State authority and designation of agent.* No certificate of insurance or surety bond will be accepted by the Commission under these rules and regulations unless written or issued by an insurance or surety company legally authorized to issue policies of the type indicated by such certificate, or surety bonds, as the case may be, in each state

in which the freight forwarder is authorized to perform service under Part IV of the Interstate Commerce Act, and such company fully complies with paragraph (b) of this section: *Provided, however,* That in lieu of the licensing requirement with respect to any state except that in which the freight forwarder has its principal place of business or domicile, the insurance or surety company will file with the Commission an agreement stating that with respect to any State requested it will furnish the Commission a designation in writing of the name and address of a person upon whom process issued by or under the authority of any court having jurisdiction of the subject matter may be served in any proceeding at law or equity brought in such State against such company. Such agreement shall be effective so long as the company is authorized to file security with the Commission, and thereafter with respect to any claims arising during the effectiveness of any previously filed certificates or surety bonds.

(Sec. 403 (c), (d), 56 Stat. 285; 49 U.S.C. 1003)

It is further ordered, That the rules herein prescribed, are hereby prescribed to become effective on July 15, 1962.

And it is further ordered, That notice of this order shall be given to the general public by depositing a copy thereof in the office of the Secretary of the Commission at Washington, D.C., and by filing a copy with the Director, Office of the Federal Register.

By the Commission, Motor Carrier Board No. 1.

[SEAL]

HAROLD D. MCCOY,
Secretary.

[F.R. Doc. 62-6851; Filed, July 12, 1962; 8:47 a.m.]

Proposed Rule Making

DEPARTMENT OF AGRICULTURE

Commodity Exchange Authority

[17 CFR Part 150]

[Hearing Docket CE-P12]

LIMITS ON POSITION AND DAILY TRADING IN WHEAT, CORN, OATS, BARLEY, FLAXSEED, COTTON, RYE, SOYBEANS, EGGS, COTTONSEED OIL, SOYBEAN OIL, AND LARD FOR FUTURE DELIVERY

Notice of Proposed Amendments

The Commodity Exchange Commission has previously issued orders pursuant to section 4a of the Commodity Exchange Act (7 U.S.C. 6a) establishing limits on position and daily trading in wheat, corn, oats, barley, flaxseed, cotton, rye, soybeans, eggs, cottonseed oil, soybean oil, and lard for future delivery (17 CFR Part 150). Each of such orders provides that "the word 'person' includes individuals, associations, partnerships, corporations, and trusts." The order establishing limits on position and daily trading in wheat, corn, oats, barley, and flaxseed for future delivery (17 CFR 150.1) provides that the position limits apply to the position which "any one person" holds or controls, but the word "one" does not appear with respect to that part of such order applicable to daily trading limits. Also, the word "one" does not appear in front of "person" in any of the other similar orders issued by the Commission.

The administrative officials of the Commodity Exchange Authority believe that it is desirable to have the orders establishing limits on position and daily trading in commodities clearly show that the orders are applicable to trading done by, or positions held by, two or more persons acting collectively, pursuant to an understanding or agreement, the same as if the trading or the positions were those of a single individual.

Notice is hereby given that it is proposed that the orders of the Commodity Exchange Commission establishing limits on position and daily trading in wheat, corn, oats, barley, flaxseed, cotton, rye, soybeans, eggs, cottonseed oil, soybean oil, and lard for future delivery (17 CFR 150.1-150.8) be amended by changing the definition of "person" in each order to read as follows: "The word 'person' shall be construed to import the plural or singular, and shall include individuals, associations, partnerships, corporations, and trusts." This is identical to the definition of "person" in the Commodity Exchange Act (7 U.S.C. 2). It is also proposed to delete the word "one" in front of "person" wherever it appears in the order establishing limits on position and daily trading in wheat, corn, oats, barley, and flaxseed for future delivery (17 CFR 150.1).

If the proposed amendments are adopted, it will be clear that it is unlawful to engage in any type of collective action, pursuant to an expressed or implied agreement or understanding, to hold positions or trade in a manner which has, or which could have, the same general market effect as if one individual were holding a position in excess of any position limit or trading in excess of any daily trading limit. Each participant in such collective action will be regarded as violating section 4a of the Act (7 U.S.C. 6a) and the relevant order of the Commission irrespective of whether he directs such collective action. For the purpose of determining compliance with the position and daily trading limits, any other method by two or more persons of attempting to evade or evading the position or daily trading limits will also be regarded as unlawful. The Commodity Exchange Act expressly provides that it is unlawful "directly or indirectly" to exceed the limits established by the Commission (7 U.S.C. 6a).

The orders establishing limits on position and daily trading in cottonseed oil, soybean oil, and lard for future delivery are not presently in effect inasmuch as such orders provide that they shall "be in full force and effect on and after such date as shall hereafter be announced by the Commodity Exchange Commission" (17 CFR 150.6(f), 150.7(f), and 150.8(f)), and the effective dates have not been announced by the Commission. While no consideration is currently being given to making such orders effective, it is proposed to amend such orders at this time so that when, and if, they become effective, it will be clear that the orders are applicable to trading done by, or positions held by, two or more persons in the circumstances referred to above.

If any interested person desires an oral hearing with reference to the proposed amendments, and notifies the Administrator of the Commodity Exchange Authority to that effect as directed below, on or before August 15, 1962, a hearing will be held in Washington, D.C., at a time and place to be announced, and all interested persons will be given an opportunity to express their views at such hearing. Requests for an oral hearing should be addressed to the Administrator, Commodity Exchange Authority, United States Department of Agriculture, Washington 25, D.C. No oral hearing will be held in the absence of such a request received on or before August 15, 1962.

Written statements with reference to the subject matter of the proposed amendments may be submitted by any interested person irrespective of whether an oral hearing is held, and may be in addition to or in lieu of testimony at an oral hearing. Such statements should be prepared in quintuplicate and mailed to the Administrator of the Commodity

Exchange Authority prior to August 15, 1962.

Issued this 10th day of July 1962.

ALEX C. CALDWELL,
Administrator,

Commodity Exchange Authority.

[F.R. Doc. 62-6861; Filed, July 12, 1962;
8:48 a.m.]

DEPARTMENT OF LABOR

Office of Welfare and Pension
Plan Reports

[29 CFR Part 1304]

WELFARE AND PENSION PLANS WITH LESS THAN 100 PARTICIPANTS

Section 7 of the Welfare and Pension Plans Disclosure Act (72 Stat. 1000; 29 U.S.C. 306), as amended by section 9 of the Welfare and Pension Plans Disclosure Act Amendments of 1962 (76 Stat. 36), provides in part for the publishing by administrators of welfare or pension benefit plans of an annual financial report. The Act provides an exemption from such reporting if a plan covers less than 100 participants. It further states, however, that the Secretary, after investigation, may require the administrator of such a plan, otherwise covered by the Act, to publish an annual report when necessary and appropriate to carry out the purposes of the Act. In order to implement these provisions and pursuant to authority in section 5 of the Welfare and Pension Plans Disclosure Act (72 Stat. 999; 76 Stat. 36; 29 U.S.C. 304) and Secretary's Order 15-62 (27 F.R. 4977), it is proposed to amend 29 CFR Chapter XI by adding a new Part 1304 to read as set forth herein.

Interested persons are hereby accorded 20 days after this document is published in the FEDERAL REGISTER to submit data, views or arguments, concerning the rules hereby proposed, in writing to the Assistant Secretary of Labor for Labor-Management Relations, 14th Street and Constitution Avenue NW., Washington 25, D.C.

The proposed regulations read as follows:

PART 1304—EXEMPTIONS FOR PLANS HAVING LESS THAN 100 PARTICIPANTS

- Sec.
1304.1 Purpose and scope.
1304.2 Definitions.
1304.3 Identification of plans covering less than 100 participants.
1304.4 Scope of exemption.
1304.5 Withdrawal of exemption.

AUTHORITY: §§ 1304.1 to 1304.5 issued under secs. 5 and 7, 72 Stat. 999, 1000; 29 U.S.C. 304, 306, as amended by sections 7, 9, 76 Stat. 36; Secretary of Labor's Order 15-62, 27 F.R. 4977.

§ 1304.1 Purpose and scope.

The purpose of this part 1304 is to implement section 7 of the Welfare and Pension Plans Disclosure Act (72 Stat. 1000, 76 Stat. 36; 29 U.S.C. 306), as amended by the Welfare and Pension Plans Disclosure Act Amendments of 1962. That section provides an exception from the requirement of publishing an annual financial report concerning employee welfare or pension benefit plans that cover less than 100 participants. That section further provides that, after investigation, the Secretary of Labor may require the administrator of any plan otherwise covered by the Act to publish an annual report when necessary and appropriate to carry out the purposes of the Act.

§ 1304.2 Definitions.

(a) The term "Assistant Secretary" shall mean the Assistant Secretary of Labor for Labor-Management Relations.

(b) The term "participant" means any employee or former employee of an employer or any member of an employee organization who is or may become eligible to receive a benefit of any type from an employee welfare or pension benefit plan, or whose beneficiaries may be eligible to receive any such benefit.

§ 1304.3 Identification of plans covering less than 100 participants.

The administrator of any covered employee welfare or pension benefit plan covering less than 100 participants is not required to publish the annual financial report specified in section 7 of the Act for any such plan: *Provided, however*, That the administrator of such a plan shall submit two copies of U. S. Department of Labor Form D-3 completed and executed in accordance with instructions contained thereon. Such forms shall be submitted within 150 days after the end of each calendar, policy, or other fiscal year during which the plan covers less than 100 participants, as provided in § 1304.4. The form calls for information necessary for identification of the plan and for a statement of the greatest number of participants covered by the plan at any one time during the reporting year. Copies of the form may be obtained by request directed to the Office of Welfare and Pension Plans, U.S. Department of Labor, Washington 25, D.C.

§ 1304.4 Scope of exemption.

The exemption contained in § 1304.3 shall not apply to any plan which covers 100 or more participants at any time during the calendar, policy, or other fiscal year upon which the records of the plan are maintained.

§ 1304.5 Withdrawal of exemption.

The Assistant Secretary, after investigation, may require the administrator of any plan otherwise subject to the provisions of the Act, but exempt from the requirement of publishing an annual financial report by reason of covering fewer than 100 participants, to publish an annual financial report containing the information required by section 7 of the Act in the form and detail prescribed in § 2.11, Part 2 of this title,

when he finds that publication of such a report is necessary and appropriate to carry out the purposes of the Act.

Signed at Washington, D.C., this 9th day of July 1962.

JAMES J. REYNOLDS,
Assistant Secretary of Labor
for Labor-Management Relations.

[F.R. Doc. 62-6847; Filed, July 12, 1962;
8:47 a.m.]

FEDERAL AVIATION AGENCY**[14 CFR Part 20]**

[Reg. Docket No. 1289; Draft Release No.
62-33]

HELICOPTER AND GYROPLANE CLASS RATINGS**Proposed Standards and Issuance Requirements**

Pursuant to the authority delegated to me by the Administrator (14 CFR 405.27), notice is hereby given that there is under consideration a proposal to amend Part 20 of the Civil Air Regulations and the manual material related thereto as hereinafter set forth.

Interested persons may participate in the making of the proposed rules by submitting such written data, views, or arguments as they may desire. Communications should be submitted, preferably in duplicate, to the Docket Section of the Federal Aviation Agency, Room A-103, 1711 New York Avenue NW., Washington 25, D.C. All communications received on or before September 13, 1962, will be considered by the Administrator before taking action on the proposed rules. The proposals contained in this notice may be changed in the light of comments received. All comments submitted will be available in the Docket Section for examination by interested persons at any time.

Until recently, the provisions of Part 20 of the Civil Air Regulations grouped all aircraft using rotating airfoils as a source of lift in the rotorcraft category with no further breakdown. Under Civil Air Regulations Amendment 20-16, which becomes effective July 12, 1962, the Agency adopted certain amendments to Part 20 which establish gyroplane and helicopter class ratings in the rotorcraft category rating.

The current aeronautical skill standards for rotorcraft category ratings were adopted primarily for the operation of helicopters, because at the time of adoption almost all rotorcraft activity was in helicopters. These standards are satisfactory for helicopters, but because of the unique performance and characteristics of gyroplanes, different aeronautical skill standards which apply specifically to gyroplanes are considered necessary. Therefore, it is proposed to amend Part 20 and the manual material related thereto by revising the current skill standards to make them applicable to helicopters only, and by adding skill standards for gyroplanes. The proposed skill standards for gyroplanes were developed after careful study of the Um-

baugh Model 18 gyroplane which has been recently certificated, and which may be typical of other gyroplanes certificated in the future.

In addition to revising the skill standards, it is proposed to amend the aeronautical knowledge requirements for the issuance of a private pilot certificate with a rotorcraft category rating to require knowledge of the use of radio aids to VFR navigation. This is considered desirable in view of the cross-country flying capabilities of helicopters and gyroplanes.

In consideration of the foregoing, it is proposed to amend Part 20 of the Civil Air Regulations (14 CFR Part 20) as follows:

1. By amending § 20.63(b) to read:

§ 20.63 Aeronautical knowledge.

(b) The practical aspects of cross-country flying, including flight planning, map reading, pilotage, the use of radio aids to VFR navigation, and radio communication procedures;

§ 20.65 [Amendment]

2. By amending § 20.65 by changing the word "type" to "class".

§ 20.65-1 [Amendment]

3. By amending § 20.65-1 by changing the word "rotorcraft" appearing in the title to "helicopter" and by deleting the last sentence in paragraph (a) (3).

4. By adding a new § 20.65-2 to read:

§ 20.65-2 Private pilot flight test—gyroplane (FAA policies which apply to § 20.65).

(a) *Flight test items.* (1) The flight test is given in three phases, and must be conducted in compliance with the Gyroplane Flight Manual. The failure of any required item in any phase constitutes the failure of that phase and of the whole flight test. The whole phase failed must be successfully completed at the time of reapplication.

(2) The flight test may be discontinued at any time by the examiner or the applicant when the failure of a required item makes the successful completion of the whole test impossible. In such cases, credit is allowed for only a whole phase successfully completed.

(3) The applicant is required to demonstrate the competent performance of the following procedures and maneuvers:

Phase I—Oral Operational Examination.

(i) Gyroplane registration, airworthiness, and equipment documents.

(ii) Gyroplane logbooks and airworthiness inspection records.

(iii) Gyroplane performance, range, and operation (from Gyroplane Flight Manual).

(iv) Gyroplane loading, including fuel, oil, and baggage capacities.

(v) Gyroplane line check.

(vi) Use of radio for voice communication (may be simulated when necessary).

Phase II—Basic Piloting Technique.

(i) Preflight operations.

(ii) Taxiing, or sailing and docking.

(iii) Normal and crosswind takeoffs and landings.

(iv) Climbs, level flight, and descents at normal speeds and at minimum level flight speeds.

PROPOSED RULE MAKING

(v) Entry and recovery from high rates of descent with and without power (recovery to be completed not lower than 300 feet above surface).

(vi) 720° steep turns about a point (45° bank at steepest point).

(vii) Roll-on landing and full flare landing.

(viii) Short field takeoff and power approach and landing.

(ix) Soft field takeoff and landing (jump takeoff, provided the gyroplane has this capability).

(x) Emergency operation of gyroplane equipment.

Phase III—Cross-country.

(i) Cross-country flight planning.

(ii) Cross-country flying.

(iii) Use of radio aids to VFR navigation.

(iv) Cross-country flying emergencies (lost, weather, overheating engine, power failure, etc.).

(b) *Evaluation of performance.* The applicant's performance is evaluated by the examiner on the basis of the judgment, knowledge, smoothness, and accuracy displayed. A competent performance of any flight maneuver is one during which the pilot is obviously the master of the aircraft, and the successful outcome of the maneuver is never in doubt.

§ 20.75 [Amendment]

5. By amending § 20.75 by changing the word "type" to "class".

§ 20.75-1 [Amendment]

6. By amending § 20.75-1 by changing the word "rotorcraft" appearing in the title to "helicopter" and by deleting the last sentence in paragraph (a)(3).

7. By adding a new § 20.75-2 to read:

§ 20.75-2 Commercial pilot flight test—gyroplane (FAA policies which apply to § 20.75).

(a) *Flight test items.* (1) The flight test is given in four phases, and must be conducted in compliance with the Gyroplane Flight Manual. The failure of any required item in any phase constitutes the failure of that phase and of the whole flight test. The whole phase failed must be successfully completed at the time of reapplication.

(2) The flight test may be discontinued at any time by the examiner or the applicant when the failure of a required item makes the successful completion of the whole test impossible. In such cases, credit is allowed for only a whole phase successfully completed.

(3) The applicant is required to demonstrate the competent performance of the following procedures and maneuvers:

Phase I—Oral Operational Examination.

(i) Gyroplane registration, airworthiness, and equipment documents.

(ii) Gyroplane logbooks and airworthiness inspection records.

(iii) Gyroplane performance, range, and operation (from Gyroplane Flight Manual).

(iv) Gyroplane loading, including fuel, oil, and baggage capacities.

(v) Gyroplane line check.

(vi) Use of radio for voice communication (may be simulated when necessary).

Phase II—Basic Piloting Techniques.

(i) Preflight operations.

(ii) Taxiing, or sailing and docking.

(iii) At least 3 takeoffs with 3 accuracy landings beyond and within 100 feet of a mark, including:

(a) Crosswind takeoff and landing.

(b) Short field takeoff and power approach and landing.

(c) Soft field takeoff and landing (jump takeoff, provided the gyroplane has this capability).

(iv) Roll-on landings and full flare landing.

(v) Airport traffic pattern.

(vi) Forced landings (single-engine only) and simulated emergencies.

(vii) Emergency operation of gyroplane equipment.

Phase III—Precision Maneuvers.

(i) Gliding spirals about a point on the ground.

(ii) One right and one left 720° steep power turn (45° bank at steepest point).

(iii) Entry and recovery from high rates of descent with and without power (recovery to be completed not lower than 300 feet above surface).

(iv) Maneuvering at minimum level flight airspeed.

Phase IV—Cross-Country Flight.

(i) Cross-country flight planning.

(ii) Cross-country flying.

(iii) Cross-country flying emergencies (lost, weather, overheating engine, power failure, etc.).

(iv) Use of radio aids to VFR navigation.

(v) Two-way radio communications.

(b) *Evaluation of performance.* The applicant's performance is evaluated by the examiner on the basis of the judgment, coordination, accuracy, and smoothness displayed. A competent performance of any flight maneuver is one during which the pilot is obviously the master of the aircraft, and the successful outcome of the maneuver is never in doubt.

8. By amending the title of § 20.130-1

(d) (3) by changing the word "rotorcraft" to "helicopter" and by deleting the related footnote.

9. By amending § 20.130-1(d) by redesignating present subparagraphs (4) and (5) as subparagraphs (5) and (6), respectively, and by adding a new subparagraph (4) to read as follows:

§ 20.130-1 Flight instructor certificates (FAA policies which apply to § 20.130).

(d) *Instructor practical test items.*

(4) *Flight test—gyroplane.* The complete flight test is conducted in compliance with the Gyroplane Flight Manual.

(i) Preflight check and oral equipment examination.

(ii) Preflight operations.

(iii) Taxiing, or sailing and docking.

(iv) Normal takeoff and landing.

(v) Crosswind takeoff and landing.

(vi) High altitude takeoff, roll-on landing, and full flare landing.

(vii) Short field takeoff and power approach and landing.

(viii) Soft field takeoff and landing (jump takeoff, provided the gyroplane has this capability).

(ix) Forced landings (single-engine only) and simulated emergencies.

(x) 720° power turns (45° bank).

(xi) Turns about a point (45° bank at steepest point).

(xii) Entry and recovery from high rates of descent with and without power (recovery to be completed not lower than 300 feet above surface).

(xiii) Maneuvering at minimum level flight airspeed.

(xiv) Airport traffic pattern.

(xv) Use of radio for voice communication-traffic control procedures.

(xvi) Emergency operation of gyroplane equipment.

The format of any final rules adopted pursuant to this proposal will be subject to such changes as may be necessary for recodification under the Agency's recodification program recently announced in Draft Release No. 61-25 (26 F.R. 10698).

These amendments are proposed under authority of sections 313(a), 601, 602 of the Federal Aviation Act of 1958 (72 Stat. 752, 775, 776; 49 U.S.C. 1354, 1421, 1422).

Issued in Washington, D.C., on July 9, 1962.

G. S. MOORE,
Acting Director,

Flight Standards Service.

[F.R. Doc. 62-6862; Filed, July 12, 1962; 8:48 a.m.]

[14 CFR Part 507]

[Reg. Docket No. 1288]

AIRWORTHINESS DIRECTIVES

Notice of Proposed Rule Making

Pursuant to the authority delegated to me by the Administrator (14 CFR Part 405), notice is hereby given that the Federal Aviation Agency has under consideration a proposal to amend Part 507 of the Regulations of the Administrator to include an airworthiness directive requiring replacement of the flame tubes on Rolls Royce Tyne Engines.

Interested persons may participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should be submitted in duplicate to the Docket Section of the Federal Aviation Agency, Room A-103, 1711 New York Avenue NW., Washington 25, D.C. All communications received on or before August 14, 1962, will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this notice may be changed in light of comments received. All comments submitted will be available in the Docket Section for examination by interested persons at any time. This proposal will not be given further distribution as a draft release.

This amendment is proposed under the authority of sections 313(a), 601, and 603 of the Federal Aviation Act of 1958 (72 Stat. 752, 775, 776; 49 U.S.C. 1354(a), 1421, 1423).

In consideration of the foregoing, it is proposed to amend § 507.10(a) of Part 507 (14 CFR Part 507), by adding the following airworthiness directive:

ROLLS ROYCE. Applies to all Tyne 512 and 515 engines with Pre-Modification 750 flame tubes installed.

Compliance required as indicated.

Investigation of an inflight failure of flame tubes on a Rolls Royce Tyne engine reveals the need for the following corrective action.

(a) Pre-Modification 750 flame tubes shall be removed and replaced with new Pre-Modification 750 or Modification 750 flame tubes as follows:

(1) On engines not incorporating a clutch mounted tail bearing (Rolls Royce Modification 549):

(1) Pre-Modification 750 flame tubes which have accumulated 325 or more hours time in service as of the effective date of this AD shall be replaced within the next 25 hours time in service after the effective date of this AD.

(11) Pre-Modification 750 flame tubes which have accumulated less than 325 hours time in service as of the effective date of this AD shall be replaced prior to the accumulation of 350 hours time in service.

(2) On engines incorporating a clutch mounted tail bearing (Rolls Royce Modification 549):

(1) Pre-Modification 750 flame tubes which have accumulated 450 or more hours time in service as of the effective date of the AD shall be replaced within the next 50 hours time in service after the effective date of this AD.

(11) Pre-Modification 750 flame tubes which have accumulated less than 450 hours time in service as of the effective date of the AD shall be replaced prior to the accumulation of 500 hours time in service.

(b) If new Pre-Modification 750 flame tubes are installed in accordance with paragraph (a), such flame tubes must be re-

placed with Modification 750 flame tubes prior to the accumulation of 350 hours time in service.

(Rolls Royce Service Bulletin No. Ty72-375 concerns the same subject.)

Issued in Washington, D.C., on July 9, 1962.

G. S. MOORE,
Acting Director,
Flight Standards Service.

[F.R. Doc. 62-6826; Filed, July 12, 1962;
8:45 a.m.]

Notices

CIVIL AERONAUTICS BOARD

[Docket No. 12285 etc.]

NEW YORK-FLORIDA RENEWAL CASE

Notice of Reconvening of Hearing

Notice is hereby given that public hearing in the above-entitled proceeding will reconvene on July 24, 1962, at 10 a.m. (local time) in Room 725, Universal Building, Connecticut and Florida Avenues NW., Washington, D.C., before the undersigned Examiner.

Dated at Washington, D.C., July 9, 1962.

[SEAL] WALTER W. BRYAN,
Hearing Examiner.

[F.R. Doc. 62-6854; Filed, July 12, 1962;
8:47 a.m.]

[Docket No. 13041]

SERVICE TO CHATTANOOGA CASE

Notice of Hearing

In the matter of the application of Braniff Airways, Inc., for amendment of its certificate for Route 9 so as to delete therefrom the intermediate point, Chattanooga, Tennessee.

Notice is hereby given, pursuant to the provisions of the Federal Aviation Act of 1958, as amended, that a hearing in the above-entitled proceeding is assigned to be held on August 2, 1962, at 10:00 a.m., e.d.s.t. in Room 911, Universal Building, Connecticut and Florida Avenues NW., Washington, D.C., before the undersigned Hearing Examiner.

For information concerning the issues involved and other details in this proceeding, interested persons are referred to Board Order E-17874, dated December 26, 1961, the prehearing conference report served June 25, 1962, and other documents which are in the docket of this proceeding on file in the Docket Section of the Civil Aeronautics Board.

Dated at Washington, D.C., July 9, 1962.

[SEAL] LESLIE G. DONAHUE,
Hearing Examiner.

[F.R. Doc. 62-6855; Filed, July 12, 1962;
8:47 a.m.]

FEDERAL COMMUNICATIONS COMMISSION

[Docket Nos. 14581, 14582; FCC 62M-957]

WIDU BROADCASTING, INC., AND AL-OR BROADCASTING CO.

Order Continuing Hearing

In re applications of WIDU Broadcasting, Inc., Asheboro, North Carolina, Docket No. 14581, File No. BP-14348; W. A. Corbett, J. R. Marlowe, Roy Cox,

6680

Jr., tr/as AL-OR Broadcasting Company, Mebane, North Carolina, Docket No. 14582, File No. BP-15051; for construction permits.

The Hearing Examiner having under consideration a rescheduling of this proceeding;

It appearing that, after an informal conference among the parties and the Hearing Examiner, a new schedule has been established as follows:

Exchange of Exhibits, September 10, 1962.
Notification of witnesses desired, September 17, 1962.

Commencement of hearing, October 1, 1962.

It is ordered, This 9th day of July 1962, that the further hearing is continued from July 17 to October 1, 1962, and that the other dates specified above will be adhered to.

Released: July 9, 1962.

FEDERAL COMMUNICATIONS COMMISSION,

[SEAL] BEN F. WAPLE,
Acting Secretary.

[F.R. Doc. 62-6864; Filed, July 12, 1962;
8:48 a.m.]

[Docket Nos. 14559-14561; FCC 62M-956]

WPOW, INC., ET AL.

Order Continuing Hearing

In re applications of WPOW, Inc., New York, New York, Docket No. 14559, File No. BR-263, for renewal of license of Station WPOW; Rensselaer Polytechnic Institute, Troy, New York, Docket No. 14560, File No. BR-267, for renewal of license of Station WHAZ; Debs Memorial Radio Fund, Incorporated, New York, New York, Docket No. 14561, File No. BR-270, for renewal of license of Station WEVD (Main & Aux.).

It is ordered, This 9th day of July 1962, on the Hearing Examiner's own motion, that the further prehearing conference scheduled for this date is continued to July 18, 1962, at 10:00 a.m.

Released: July 9, 1962.

FEDERAL COMMUNICATIONS COMMISSION,

[SEAL] BEN F. WAPLE,
Acting Secretary.

[F.R. Doc. 62-6863; Filed, July 12, 1962;
8:48 a.m.]

FEDERAL POWER COMMISSION

[Docket No. RI62-467 etc.]

H. L. HUNT ET AL.

Order Permitting Withdrawal of Suspended Increased Rates, Severing Proceedings and Terminating Proceedings as Moot

JULY 6, 1962.

H. L. Hunt, et al. Docket Nos. RI62-467, et al.; Shell Oil Company (Opera-

tor), et al. Docket No. RI62-472; Shell Oil Company, Docket No. RI62-473; The British-American Oil Producing Company, Docket No. RI62-474; Sunray DX Oil Company, Docket No. RI62-480.

Shell Oil Company for itself and as (Operator), et al. (Shell), The British-American Oil Producing Company (British-American) and Sunray DX Oil Company (Sunray), on June 25, 1962, June 26, 1962, and June 28, 1962, respectively, submitted notices of withdrawal of suspended rate supplements which proposed periodic increased rates for gas sold to Transcontinental Gas Pipe Line Corporation (Transcontinental) from various fields in South Louisiana.

The subject rate filings and the related suspension proceedings are:

| Rate schedule supplement No. | Purchaser | Suspended rate per Mcf | Suspension docket No. |
|------------------------------|----------------------------------|------------------------|-----------------------|
| 198-4 ¹ | Transcontinental | 25.55 | RI62-472 |
| 200-2 ² | do | 25.55 | RI62-473 |
| 208-1 ³ | do | 25.55 | RI62-473 |
| 126-4 ⁴ | Gas Gathering Corp. ⁵ | 23.05 | RI62-473 |
| 42-2 ¹ | Transcontinental | 25.55 | RI62-474 |
| 215-1 ¹ | do | 25.55 | RI62-480 |
| 216-1 ¹ | do | 25.55 | RI62-480 |

¹ Shell Oil Co. (Operator), et al.

² Shell Oil Co.

³ The British-American Oil Producing Co.

⁴ Sunray DX Oil Co.

⁵ Resells to Transcontinental.

The proposed increased rates of Shell, British-American and Sunray were suspended by order issued June 14, 1962 in H. L. Hunt, et al., Docket Nos. RI62-467, et al., until December 1, 1962, and until such further time as they are made effective pursuant to the provisions of the Natural Gas Act. That order also consolidated the proceedings of the subject producers with several others and set such proceedings for immediate hearing to be held July 16, 1962.

The Commission finds: Good cause exists for permitting Shell Oil Company, Shell Oil Company (Operator), et al., The British-American Oil Producing Company, and Sunray DX Oil Company to withdraw the above-designated suspended supplements, for severing the proceedings in Docket Nos. RI62-472, RI62-473, RI62-474, and RI62-480 from the consolidated proceedings in H. L. Hunt, et al., Docket Nos. RI62-467, et al., and for terminating the proceedings in Docket Nos. RI62-472, RI62-473, RI62-474, and RI62-480.

The Commission orders:

(A) Shell Oil Company, Shell Oil Company (Operator), et al., The British-American Oil Producing Company and Sunray DX Oil Company are hereby permitted to withdraw the above-designated suspended supplements.

(B) The proceedings in Docket Nos. RI62-472, RI62-473, RI62-474, and RI62-480 are hereby severed from the consolidated proceedings in H. L. Hunt, et al., Docket Nos. RI62-467, et al.

(C) The proceedings in Docket Nos. RI62-472, RI62-473, RI62-474, and RI62-480 are hereby terminated as moot.

By the Commission.

JOSEPH H. GUTRIDE,
Secretary.

[F.R. Doc. 62-6856; Filed, July 12, 1962;
8:47 a.m.]

[Docket No. CP62-171]

ILLINOIS POWER CO.

Notice Changing Date of Hearing

JULY 6, 1962.

Take notice that the hearing on the application herein now set to be held on July 26, 1962, is hereby reset for hearing on July 30, 1962, at 10:00 a.m., e.d.s.t., in a Hearing Room of the Federal Power Commission, 441 G Street NW., Washington, D.C.

JOSEPH H. GUTRIDE,
Secretary.

[F.R. Doc. 62-6857; Filed, July 12, 1962;
8:47 a.m.]

[Docket No. RI63-1]

SKELLY OIL CO. (OPERATOR), ET AL.

Order Providing for Hearing on and Suspension of Proposed Changes in Rates and Allowing Increased Rates To Become Effective

JULY 6, 1962.

On June 7, 1962, Skelly Oil Company (Operator), et al., (Skelly)¹ tendered for filing a proposed change in its presently effective rate schedule covering gas produced from the Hugoton Field, Sherman and Hansford Counties, Texas (R.R. Dist. No. 10) and sold subject to the jurisdiction of this Commission to Phillips Petroleum Company (Phillips). The proposed change, which constitutes increased rates and charges, is contained in the following designated filing:

Description: Notice of Change, dated June 6, 1962.

Rate schedule designation: Supplement No. 14 to Skelly Oil Company (Operator), et al., FPC Gas Rate Schedule No. 28.²

Effective date: July 7, 1962 (stated effective date is the first day after expiration of the required thirty days' notice).

Rates in effect: 6.86618 cents per Mcf for "sweet" gas and 6.36136 cents per Mcf for "sour" gas, 14.65 psia.

Proposed increased rates: 10.59239 cents per Mcf for "sweet" gas and 9.84230 cents per Mcf for "sour" gas, at 1465 psia.

Annual increase: \$98,397 for "sweet" gas and \$2,569 for "sour" gas.

Since the proposed revenue-sharing increases of Skelly are based on the resale rate of the purchaser, Phillips, which is in effect subject to refund in Docket No. RI60-349, it is believed that

such increases should be suspended for one day from the proposed effective date of July 7, 1962.

The proposed increased rates and charges may be unjust, unreasonable, unduly discriminatory, or preferential, or otherwise unlawful.

The Commission finds: It is necessary and proper in the public interest and to aid in the enforcement of the provisions of the Natural Gas Act that the Commission enter upon a hearing concerning the lawfulness of the proposed changes, and that Supplement No. 14 to Skelly's FPC Gas Rate Schedule No. 28 be suspended and the use thereof deferred as hereinafter ordered.

The Commission orders:

(A) Pursuant to the authority of the Natural Gas Act, particularly sections 4 and 15 thereof, the Commission's rules of practice and procedure, and the regulations under the Natural Gas Act [18 CFR, Ch. I] a public hearing be held upon a date to be fixed by notice from the Secretary concerning the lawfulness of the proposed increased rates and charges contained in Supplement No. 14 to Skelly's FPC Gas Rate Schedule No. 28.

(B) Pending such hearing and decision thereon, Supplement No. 14 to Skelly's Rate Schedule No. 28 is hereby suspended and the use thereof deferred until July 8, 1962, and thereafter until such further time as it is made effective in the manner prescribed by the Natural Gas Act: *Provided, however,* That said supplement shall become effective subject to refund on the date and in the manner herein prescribed if within 20 days from the date of issuance of this order Skelly shall execute and file under the captioned and above-designated docket number with the Secretary of the Commission its agreement and undertaking to comply with the refunding and reporting procedure required by the Natural Gas Act and § 154.102 of the Regulations thereunder, accompanied by a certificate showing service of copies thereof upon the purchaser under the rate schedule involved. Unless Skelly is advised to the contrary within 15 days after the filing of its agreement and undertaking, such agreement and undertaking shall be deemed to have been accepted.

(C) Neither the supplement hereby suspended, nor the rate schedule sought to be altered thereby, shall be changed until this proceeding has been disposed of or until the period of suspension has expired, unless otherwise ordered by the Commission.

(D) Notices of intervention or petitions to intervene may be filed with the Federal Power Commission, Washington 25, D.C., in accordance with the rules of practice and procedure (18 CFR 1.8 and 1.37) on or before August 17, 1962.

By the Commission.

JOSEPH H. GUTRIDE,
Secretary.

[F.R. Doc. 62-6858; Filed, July 12, 1962;
8:48 a.m.]

[Docket No. G-12322]

UNITED GAS PIPE LINE CO.

Notice of Motion to Amend

JULY 6, 1962.

Take notice that on March 30, 1962, United Gas Pipe Line Company (United), 1525 Fairfield Avenue, Shreveport, Louisiana, filed a motion to amend the Commission's order issued June 14, 1957, as amended, in Docket No. G-12322, so as to permit increased deliveries of natural gas to Pontiac Eastern Corporation (Pontiac), all as more fully set forth in the motion on file with the Commission and open to public inspection.

The subject order issued to United a certificate of public convenience and necessity authorizing the construction and operation of certain facilities and the delivery of up to 5,000 Mcf of natural gas per day to Pontiac for use as fuel in the latter's Purvis Refinery in Lamar County, Mississippi. By order of July 17, 1958, the subject order was amended to authorize the delivery of natural gas by United to Pontiac in quantities set forth in an amendatory gas purchase agreement, dated May 23, 1958. This latter agreement provided that United deliver up to 7,500 Mcf per day to Pontiac and temporary additional volumes of gas as required by Pontiac after periodic shut-downs of its refinery, provided that in no event shall total deliveries exceed 11,000 Mcf of gas in any one day.

United in the subject motion requests authorization to deliver up to 10,000 Mcf per day in lieu of 7,500 Mcf per day, without altering the temporary additional volume required after shut-down of up to 11,000 Mcf in any one day.

Protests, requests for hearing, or petitions to intervene in this proceeding may be filed with the Federal Power Commission, Washington 25, D.C., in accordance with the Commission's rules of practice and procedure (18 CFR 1.8 or 1.10) on or before August 2, 1962.

JOSEPH H. GUTRIDE,
Secretary.

[F.R. Doc. 62-6859; Filed, July 12, 1962;
8:48 a.m.]

FEDERAL MARITIME COMMISSION

STONE FORWARDING CO., INC., ET AL.

Agreements Filed for Approval

Notice is hereby given that the following agreements have been filed with the Federal Maritime Commission for approval pursuant to section 15 of the Shipping Act, 1916, as amended.

Agreement No. 8773 between Stone Forwarding Company, Inc. (Galveston, Houston, and Corpus Christi) and W. L. Richeson & Sons, Inc. (New Orleans) is a cooperative working arrangement under which the parties will perform freight forwarding services for each other, dividing forwarding fees on the basis of the services to be performed.